

Site Permit Determination Application

S.P.M. Flow Control, Inc. (Buckhannon Site)
52 Norwins Drive
Buckhannon, West Virginia 26201

February 25, 2015
Terracon Project No. 94137584



Prepared for:
S.P.M. Flow Control, Inc.
Fort Worth, Texas

Prepared by:
Terracon Consultants, Inc.
Dallas, Texas

terracon.com

Terracon

Environmental



Facilities



Geotechnical



Materials



February 25, 2015

West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, West Virginia 25304

Phone: 304 926 0475
Fax: 304 926 0479

Re: Request for Site Permit Determination
S.P.M. Flow Control, Inc. - Buckhannon
52 Norwins Drive
Buckhannon, West Virginia 26201
Terracon Project No. 94137584

Dear Sir/Madam:

Terracon Consultants, Inc. (Terracon) has prepared the attached site permit determination application on behalf of S.P.M. Flow Control, Inc. for the above referenced site (site) to request for determination of permitting requirement for the site. The site is involved in refurbishing iron parts not limited to swivels, straight joints, sections, and pipes.

If you have any questions regarding this report, please contact the undersigned at Terracon.

Sincerely,
Terracon Consultants, Inc.

Bala Sriram Sridharan, P.E.
Senior Environmental Engineer

Paul Howard
Senior Environmental Scientist

Attachment: See list below

ATTACHMENTS

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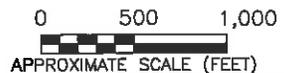


ATTACHMENT A – FACILITY LOCATION MAP

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THIS DRAWING SHOULD NOT BE USED SEPARATELY FROM ORIGINAL REPORT.



Project Mgr:	BSS
Drawn By:	JJD
Checked By:	BSS
Approved By:	BSS

Project No.	94137584
Scale:	AS SHOWN
Date:	07/22/14

Terracon
 Consulting Engineers and Scientists
 (Registration No.: F-3272)
 8901 CARPENTER FREEWAY DALLAS, TEXAS 75247
 PH. (214) 630-1010 FAX. (214) 630-7070

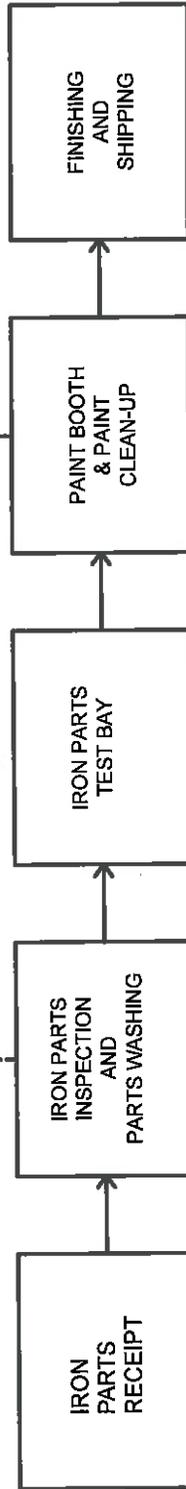
AERIAL MAP

WEIR SPM
 52 NORWINS DRIVE
 BUCKHANNON, WEST VIRGINIA 26201

EXHIBIT
1



ATTACHMENT B – PROCESS FLOW DIAGRAM



PROCESS FLOW DIAGRAM

WEIR SPM
52 NORWINS DRIVE
BUCKHANNON, WEST VIRGINIA 26201

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Scale:	NOT TO SCALE
Date:	07/22/14

Project Mgr:	BSS
Drawn By:	CDD
Checked By:	BSS
Approved By:	BSS

THIS DRAWING SHOULD NOT BE USED SEPARATELY FROM ORIGINAL REPORT.



ATTACHMENT C – PROCESS DESCRIPTION

1.0 PROCESS DESCRIPTION

The site disassembles, inspects, rebuilds, and paints oilfield parts made of iron like swivels, straight joints, sections, pipes and pumps. In general, the process involves, inspection and evaluation of the equipment, disassembly, and then various stages of reconditioning are performed depending on the specific requirements per piece of equipment. Below is a description of various on-site processes:

1.1 Inventory Receipt

The iron parts and pumps arrive at the site and are dismantled. Emissions are not anticipated to be generated during the dismantling process.

1.2 Iron Parts Inspection and Parts Washing (2E, 3E, & 4E)

Iron parts and pumps are disassembled and visually inspected. The equipment and their components are washed in Inland Technologies IT-80 parts washers (2S, 3S, & 4S) using the Skysol solvent in a recirculating solid stream to remove dirt and grease. Fugitive Volatile Organic Compounds (VOCs) emissions are anticipated from the parts washers, but no emissions are expected to be generated during the inspection process.

1.3 Magnetic Particle Inspection

After the visual inspection and cleaning, iron parts and pumps are inspected using a magnetic particle inspection machine to check for material defects. Then the parts and pumps are sent for pressure testing. No emissions are expected to be generated during this inspection.

1.4 Pressure Testing

Iron parts and pumps are pressure tested using water. Iron parts and pumps meeting the specifications are sent for painting. Emissions are not anticipated to be generated during pressure testing.

1.5 Paint Booth and Paint Gun Cleanup (1E)

The site has an open front industrial paint booth with working dimensions of 14' in width by 15' in depth by 8'. The paint booth (1S) will operate with an exhaust rate of 10,700 cubic feet per minute (CFM).

Coatings are applied with one high volume low pressure (HVLP) spray gun with an individual delivery rate of one gallon per hour. For calculating emissions from the paint booth, the average spray rate of the gun is considered to be 1.0 gallons per hour. The paint booth is

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equipped with a filter capable of reducing particulate matter emissions by 98.81%. The painting operations are followed by curing where residual VOCs will be emitted. VOC emission calculations assume that the VOC in the coatings are completely emitted to account for emissions from coating and curing operations within the paint booth.

The facility utilized one painter per shift. The painter prepares iron parts or pumps on a mobile rack for painting and then loads the rack into the paint booth to begin painting operations. After coating is applied as per specifications, the rack with the iron parts or pumps is allowed to dry before unloading the rack out of the paint booth to prepare the iron parts or pumps for the next stage. It is estimated that it will take approximately 25 minutes to paint the iron parts or pumps and allow them to dry. Rest of the time in an hour will be spent in preparation, loading, and unloading operations. Due to the physical constraints discussed above, the maximum paint time cannot exceed approximately 3,650 hours per year and will be used to determine the maximum potential to emit. Based on the proposed operating schedule (paint booth available for 10 hours per day, 6 days per week for 52 weeks) and the above discussed physical limitations, the anticipated hours of painting will be approximately 1300 hours per year.

The paint gun is periodically cleaned using Inland Technologies IT-200 automated gun cleaner (5S) within the paint booth. The solvent used will be EP-921. Fugitive VOCs are expected to be generated from the gun cleaning and will be emitted through the paint booth stack (1E).

MSDS of the coatings, solvents, and manufacturer's specifications for the paint booth, HVLP spray guns, and filter have been included in Appendix D & G of this application. Facility drawings are attached in Appendix A.

1.6 Reassembly, Inspection, and Shipping

Following painting, the parts and pumps are reassembled, a final inspection is performed and the iron or pump is ready for customer pick-up. Emissions are not expected to be generated during this process.

Material Safety Data Sheet



Date of issue 16 May 2014

Version 25

1. Product and company identification

Product name : ALK FD EN-GRAY PRIMER
Code : FSC16013
Supplier : PPG Industries, Inc.
TrueFinishes
One PPG Place
Pittsburgh, PA 15272
Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
Technical Phone Number : 1-800-441-9695 (8:00 am to 5:00 pm EST)

2. Hazards identification

Emergency overview : DANGER!

FLAMMABLE LIQUID AND VAPOR. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY BE HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED. SANDING AND GRINDING DUSTS MAY BE HARMFUL IF INHALED. ASPIRATION HAZARD. CAN ENTER LUNGS AND CAUSE DAMAGE. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.

Keep away from flames, such as a pilot light, and any object that sparks, such as an electric motor. Keep away from heat. Do not smoke. Do not breathe vapor or mist. Do not swallow. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation : May be harmful if inhaled. Severely irritating to the respiratory system. Can irritate eyes, nose, mouth and throat.
Ingestion : May be harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.
Skin : Harmful in contact with skin. Irritating to skin.
Eyes : Irritating to eyes.

Over-exposure signs/symptoms

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone.

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See toxicological information (Section 11)

3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Diethylene glycol	8032-32-4	10 - 30
xylene	1330-20-7	10 - 30
Talc, not containing asbestiform fibres	14807-96-6	3 - 7
Kaolin	1332-58-7	3 - 7
Solvent naphtha (petroleum), light aromatic	64742-95-6	3 - 7
titanium dioxide	13463-67-7	3 - 7
ethylbenzene	100-41-4	1 - 5
1,2,4-trimethylbenzene	95-63-6	1 - 5
Stoddard solvent	8052-41-3	0.5 - 1.5
toluene	108-88-3	0.1 - 1
carbon black respirable	1333-86-4	0.1 - 1
2-butanone oxime	96-29-7	0.1 - 1
cumene	98-82-8	0.1 - 1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Extinguishing media

Suitable : Use dry chemical, CO₂, water spray (fog) or foam.

Not suitable : Do not use water jet.

Special exposure hazards : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Hazardous combustion products : Decomposition products may include the following materials:
carbon oxides
metal oxide/oxides

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage

- Handling** : Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite. To avoid the risks of fires, all contaminated materials should be placed in a metal container filled with water and sealed. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside. Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not breathe vapor or mist. Do not swallow. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Vapors are heavier than air and may spread along floors. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store above the following temperature: 120F / 49C.

8 . Exposure controls/personal protection

Name	Result	ACGIH	OSHA	Ontario	Mexico	PPG
Ligroine	TWA	Not established	Not established	Not established	300 ppm	Not established
	STEL	Not established	Not established	Not established	400 ppm	Not established
xylene	TWA	100 ppm	100 ppm	100 ppm	100 ppm	Not established
	STEL	150 ppm	Not established	150 ppm	150 ppm	Not established
Talc , not containing asbestiform fibres	TWA	Not established	20 mppcf Z	2 mg/m ³ R 2 f/cc	2 mg/m ³ R 6 mg/m ³ 3 mg/m ³ R	Not established
Kaolin	TWA	2 mg/m ³ R	15 mg/m ³ TD 5 mg/m ³ R	2 mg/m ³ R	10 mg/m ³	Not established
	STEL	Not established	Not established	Not established	20 mg/m ³	Not established
titanium dioxide	TWA	10 mg/m ³	15 mg/m ³ TD	10 mg/m ³ TD	10 mg/m ³ (as Ti)	Not established
	STEL	Not established	Not established	Not established	20 mg/m ³ (as Ti)	Not established
ethylbenzene	TWA	20 ppm	100 ppm	20 ppm	100 ppm	Not established
	STEL	Not established	Not established	Not established	125 ppm	Not established
1,2,4-trimethylbenzene	TWA	25 ppm	Not established	25 ppm	25 ppm	Not established
	STEL	Not established	Not established	Not established	35 ppm	Not established
Stoddard solvent	TWA	100 ppm	500 ppm	100 ppm	100 ppm	Not established
	STEL	Not established	Not established	Not established	200 ppm	Not established
toluene	TWA	20 ppm	200 ppm Z	20 ppm	50 ppm S	Not established
	STEL	Not established	500 ppm Z A 300 ppm Z C	Not established	Not established	Not established
carbon black respirable	TWA	3 mg/m ³	3.5 mg/m ³	3 mg/m ³	3.5 mg/m ³	Not established
	STEL	Not established	Not established	Not established	7 mg/m ³	Not established
2-butanone oxime	TWA	Not established	Not established	Not established	Not established	3 ppm
	STEL	Not established	Not established	Not established	Not established	10 ppm
cumene	TWA	50 ppm	50 ppm S	50 ppm S	50 ppm S	Not established
	STEL	Not established	Not established	Not established	75 ppm S	Not established

8 . Exposure controls/personal protection

Key to abbreviations

A	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

Consult local authorities for acceptable exposure limits.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- Engineering measures** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Personal protection**
- Eyes** : Safety glasses with side shields.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Gloves** : For prolonged or repeated handling, use the following type of gloves:
Recommended: nitrile rubber
- Respiratory** : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

Physical state	: Liquid.
Flash point	: Closed cup: 14.44°C (58°F)
Explosion limits	: Lower: 0.9%
Material supports combustion.	: Yes.
Color	: Not available.
Odor	: Not available.
pH	: Not available.
Boiling/condensation point	: >37.78°C (>100°F)
Melting/freezing point	: Not available.
Specific gravity	: 1.05
Density (lbs / gal)	: 8.76
Vapor pressure	: 1.3 kPa (9.8 mm Hg) [room temperature]
Vapor density	: Not available.
Volatility	: 4% (v/v), 57.38% (w/w)
Evaporation rate	: 0.84 (butyl acetate = 1)
Partition coefficient: n-octanol/water	: Not available.
% Solid. (w/w)	: 2.62

10 . Stability and reactivity

Stability	: Stable under recommended storage and handling conditions (see Section 7).
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Materials to avoid	: Reactive or incompatible with the following materials: acids, oxidizing materials, strong alkalis
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Ligroine xylene	LC50 Inhalation	Rat	3400 ppm	4 hours
	LD50 Oral	Rat	4.3 g/kg	-
	LD50 Dermal	Rabbit	>1.7 g/kg	-
	LC50 Inhalation Vapor	Rat	5000 ppm	4 hours
Kaolin	LD50 Oral	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
	LD50 Dermal	Rabbit	3.48 g/kg	-
Solvent naphtha (petroleum), light aromatic	LD50 Oral	Rat	>10 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
titanium dioxide	LD50 Oral	Rat	>5000 mg/kg	-
	LD50 Dermal	Rabbit	>5000 mg/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat	4000 ppm	4 hours
	LD50 Oral	Rat	5 g/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation	Rat	18000 mg/m3	4 hours
	LD50 Oral	Rat	>5 g/kg	-
Stoddard solvent toluene	LD50 Oral	Rat	636 mg/kg	-
	LD50 Oral	Rat	8.39 g/kg	-
	LD50 Dermal	Rabbit	8.39 g/kg	-

Product name ALK FD EN-GRAY PRIMER

11 . Toxicological information

carbon black respirable	LC50 Inhalation	Rat	49 g/m3	4 hours
	LD50 Oral	Rat	>15400 mg/kg	-
	LD50 Dermal	Rabbit	>3 g/kg	-
2-butanone oxime	LD50 Oral	Rat	930 mg/kg	-
	LD50 Dermal	Rabbit	200 uL/kg	-
cumene	LD50 Oral	Rat	1.4 g/kg	-
	LD50 Dermal	Rabbit	12.3 g/kg	-
	LC50 Inhalation	Rat	39000 mg/m3	4 hours

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Defatting irritant

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Target organs

: Contains material which causes damage to the following organs: brain, central nervous system (CNS).

Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, liver, gastrointestinal tract, cardiovascular system, upper respiratory tract, skin, ears, eye, lens or cornea, stomach, testes.

Carcinogenicity**Carcinogenicity**

: Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.

Classification

Product/ingredient name	ACGIH	IARC	NTP	OSHA
xylene	A4	3	-	-
Kaolin	A4	-	-	-
titanium dioxide	A4	2B	-	-
ethylbenzene	A3	2B	-	-
toluene	A4	3	-	-
carbon black respirable	A3	2B	-	-
cumene	-	2B	-	-

Carcinogen Classification code:
 ACGIH: A1, A2, A3, A4, A5
 IARC: 1, 2A, 2B, 3, 4
 NTP: Proven, Possible
 OSHA: +
 Not listed or regulated as a carcinogen: -

Developmental effects

: Contains material which may cause developmental abnormalities, based on animal data.

Fertility effects

: Contains material which may impair female fertility, based on animal data.

12 . Ecological information**Environmental effects**

: No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
ethylbenzene	Acute LC50 150 to 200 mg/L Fresh water	Fish - Bluegill - Lepomis macrochirus	96 hours

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	TDG	Mexico	IMDG
UN number	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3
Packing group	II	II	II	II
Environmental hazards	No.	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	88.05	Not applicable.	Not applicable.	Not applicable.
RQ substances	(xylene, ethylbenzene)	Not applicable.	Not applicable.	Not applicable.

Additional information

- DOT** : Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
- TDG** : None identified.
- Mexico** : None identified.
- IMDG** : None identified.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. Regulatory information

- United States inventory (TSCA 8b)** : All components are listed or exempted.
- Australia inventory (AICS)** : At least one component is not listed.
- Canada inventory (DSL)** : At least one component is not listed in DSL but all such components are listed in NDSL.
- China inventory (IECSC)** : Not determined.
- Europe inventory (REACH)** : Please contact your supplier for information on the inventory status of this material.
- Japan inventory (ENCS)** : Not determined.
- Korea inventory (KECI)** : Not determined.
- New Zealand (NZIoC)** : Substance Use Restricted
- Philippines inventory (PICCS)** : At least one component is not listed.

United States

U.S. Federal regulations :

SARA 302/304: No products were found.

ERCLA: Hazardous substances.: toluene: 1000 lbs. (454 kg); ethylbenzene: 1000 lbs. (454 kg); xylene: 100 lbs. (45.4 kg); cumene: 5000 lbs. (2270 kg); zinc oxide: No RQ is being assigned to the generic or broad class.;

SARA 311/312 SDS Distribution - Chemical Inventory - Hazard Identification:

<u>Chemical name</u>	<u>CAS #</u>	<u>Acute</u>	<u>Chronic</u>	<u>Fire</u>	<u>Reactive</u>	<u>Pressure</u>
<input checked="" type="checkbox"/> Ligroine	8032-32-4	Y	N	Y	N	N
xylene	1330-20-7	Y	N	Y	N	N
Talc , not containing asbestiform fibres	14807-96-6	Y	N	N	N	N
Kaolin	1332-58-7	Y	N	N	N	N
Solvent naphtha (petroleum), light aromatic	64742-95-6	Y	N	Y	N	N
titanium dioxide	13463-67-7	N	Y	N	N	N
ethylbenzene	100-41-4	Y	Y	Y	N	N
1,2,4-trimethylbenzene	95-63-6	Y	N	Y	N	N
Stoddard solvent	8052-41-3	Y	N	Y	N	N
toluene	108-88-3	Y	Y	Y	N	N
carbon black respirable	1333-86-4	N	Y	N	N	N
2-butanone oxime	96-29-7	Y	Y	Y	Y	N
cumene	98-82-8	Y	Y	Y	N	N
Product as-supplied :		Y	Y	Y	N	N

SARA 313

<u>Supplier notification</u>	<u>Chemical name</u>	<u>CAS number</u>	<u>Concentration</u>
	xylene	1330-20-7	10 - 30
	ethylbenzene	100-41-4	1 - 5
	1,2,4-trimethylbenzene	95-63-6	1 - 5

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Canada

WHMIS (Canada) : Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

Mexico

Classification

Flammability : 3 **Health** : 2 **Reactivity** : 0

Product code FSC16013

Date of issue 16 May 2014

Version 25

Product name ALK FD EN-GRAY PRIMER

16 . Other information

Hazardous Material Information System (U.S.A.)

Health : 2 * Flammability : 3 Physical hazards : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 2 Flammability : 3 Instability : 0

Date of previous issue : 3/15/2014.

Organization that prepared the MSDS : EHS

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

M A T E R I A L S A F E T Y D A T A S H E E T

44B08 WR BLACK ENAMEL

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PRODUCT NAME: 44B08 WR BLACK ENAMEL
PRODUCT CODE: 44B08

44B08

HMIS CODES: H F R P
2 1 0 G

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: H-I-S PAINT MANUFACTURING COMPANY LLC
ADDRESS : 1801 WEST RENO
OKLAHOMA CITY, OKLAHOMA 73106-3217
EMERGENCY PHONE : 405-232-2077 DATE PRINTED : 5/3/2010
INFORMATION PHONE : 405-232-2077 REVISION DATE : 01/13/10
24 HOUR EMERGENCY : 405-640-5304 NAME OF PREPARER : STEVE BUSSJAEGER
24HR EMERGENCY (ALT) : 405-376-3593, 405-692-7269, or 405-755-1257

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
* ETHYLENE GLYCOL MONOBUTYL ETHER (2-BUTOXY ETHANOL)	111-76-2	0.6 68°F	13.8
ACGIH TLV: 25 PPM - TWA, SKIN			
OSHA PEL: 25 PPM - TWA, SKIN			
H-I-S: 120 mg/m3			
LD50: ORAL: 1746 mg/kg (RAT) DERMAL: 435 mg/kg (RABBIT)			
LC50: INHALATION: +800 PPM/ 8 HR (RAT)			

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372. This material contains ingredients covered by the California "Safe Drinking Water and Toxic Enforcement Act of 1986." All components of this product are present on the United States Toxic Substances Control Act (TSCA) chemical substances inventory.

===== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 336°F SPECIFIC GRAVITY (H2O=1): 1.03
VAPOR DENSITY: Heavier than air WEIGHT PER GALLON: 8.57 lb/gl
COATING V.O.C.: 3.24 lb/gl MATERIAL V.O.C.: 1.36 lb/gl
COATING V.O.C.: 389 g/l MATERIAL V.O.C.: 162 g/l
EVAPORATION RATE: Slower than ether
SOLUBILITY IN WATER: Material is water soluble and/or dispersable in water
APPEARANCE AND ODOR: Liquid, mild odor

===== SECTION IV - FIRE AND EXPLOSION HAZARD DATA =====

FLASH POINT:
Noncombustible

EXTINGUISHING MEDIA:
Foam, CO2, dry chemical.

SPECIAL FIREFIGHTING PROCEDURES
None known. However, fire fighters should wear self-contained breathing apparatus to avoid inhalation if material is involved in a general fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Closed containers exposed to extreme heat may rupture due to pressure buildup. Product will not burn, but may spatter

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44B08 WR BLACK ENAMEL

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if temperature exceeds boiling point of product. Dried finish can burn, giving off oxides of carbon.

===== SECTION V - REACTIVITY DATA =====

STABILITY:

Stable

CONDITIONS TO AVOID

Excessive heat, poor ventilation, excessive aging.

INCOMPATIBILITY (MATERIALS TO AVOID)

None known.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

Thermal decomposition or combustion can produce fumes of carbon dioxide and carbon monoxide.

HAZARDOUS POLYMERIZATION:

Will not occur under normal conditions.

===== SECTION VI - HEALTH HAZARD DATA =====

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Vapor or mist can cause headache, nausea and irritation of the nose, throat and lungs in poorly ventilated areas.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Skin contact: Irritating to the skin on repeated or prolonged contact. Eye contact: Direct contact may cause eye irritation.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

No adverse effects from available information.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Can cause gastrointestinal irritation.

HEALTH HAZARDS (ACUTE AND CHRONIC)

Acute effects are listed above. No known chronic effects.

CARCINOGENICITY: NTP CARCINOGEN: N/A IARC MONOGRAPHS: N/A OSHA LISTED: N/A

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Pre-existing eye, skin and respiratory disorders.

EMERGENCY AND FIRST AID PROCEDURES

Inhalation- Move person to fresh air. Eye contact- Flush immediately with a large amount of water for at least 15 minutes and get medical attention. Skin contact- Wash thoroughly with soap and water while removing contaminated clothing and shoes. Ingestion- Do not induce vomiting! Contact physician or your local poison control center immediately.

===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Dike spill area and add absorbent earth, sand or sawdust to spilled liquid. Keep out of sewers.

WASTE DISPOSAL METHOD

Collect absorbent/spilled liquid into metal containers. Dispose of in accordance with local, state, and federal

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regulations. Do not incinerate closed containers. Incinerate in approved facility. Obey relevant laws.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep containers tightly closed when not in use. Store in cool, well ventilated areas away from heat and out of direct sunlight. **KEEP FROM FREEZING!** Wash thoroughly after handling.

OTHER PRECAUTIONS

DO NOT TAKE INTERNALLY. KEEP OUT OF REACH OF CHILDREN. Avoid prolonged breathing of vapor or spray mist. Avoid prolonged or repeated contact with skin. Use with adequate ventilation. Wash hands after using and before smoking or eating. Follow all hazard precautions given in this data sheet until container is thoroughly cleaned or destroyed.

===== **SECTION VIII - CONTROL MEASURES** =====

RESPIRATORY PROTECTION

Do not breathe vapors or spray mist. Wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during the use of this product until vapor and mists levels are below applicable exposure limits. Observe OSHA Standard 29CFR1910.134.

VENTILATION

Provide general clean air dilution or local exhaust ventilation in volume and pattern to keep the air contaminant concentration below applicable exposure limits. Refer to OSHA Standard 29CFR1910.94.

PROTECTIVE GLOVES

Polyethylene handling gloves for skin protection. Must be impervious to water and soap.

EYE PROTECTION

Use chemical safety glasses or goggles (ANSI Z87.1-1968).

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Provide eyewash station and emergency shower. Use of protective creams, head caps, etc. is recommended. Avoid contact with contaminated clothing. Wash contaminated clothing, including shoes, before reuse.

WORK/HYGIENIC PRACTICES

Wash hands before eating or using washroom, smoke in smoking areas only.

===== **SECTION IX - DISCLAIMER** =====

To the best of our knowledge, the information contained herein is based on data considered accurate. No warranty expressed or implied is made. H-I-S Paint assumes no responsibility for damage to person, property or business caused by the material. It is the responsibility of the purchaser or user of the material to ensure that it is properly used.

Material Safety Data Sheet



Date of issue 16 May 2014
Version 14

1. Product and company identification

Product name : BLACK ALKYD ENAMEL
Code : QT110BK256/01
Supplier : PPG Industries, Inc.
TrueFinishes
One PPG Place
Pittsburgh, PA 15272
Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
Technical Phone Number : 1-800-441-9695 (8:00 am to 5:00 pm EST)

2. Hazards identification

Emergency overview : DANGER!
FLAMMABLE LIQUID AND VAPOR. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY BE HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED. ASPIRATION HAZARD. CAN ENTER LUNGS AND CAUSE DAMAGE. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.
Keep away from flames, such as a pilot light, and any object that sparks, such as an electric motor. Keep away from heat. Do not smoke. Do not swallow. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation : May be harmful if inhaled. Irritating to respiratory system. Can irritate eyes, nose, mouth and throat.
Ingestion : May be harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.
Skin : Harmful in contact with skin. Irritating to skin.
Eyes : Irritating to eyes.

Over-exposure signs/symptoms

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone.

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See toxicological information (Section 11)

3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
xylene	1330-20-7	10 - 30
Solvent naphtha (petroleum), medium aliph.	64742-88-7	7 - 13
Ligroine	8032-32-4	7 - 13
Solvent naphtha (petroleum), light aromatic	64742-95-6	3 - 7
ethylbenzene	100-41-4	1 - 5
1,2,4-trimethylbenzene	95-63-6	1 - 5
carbon black respirable	1333-86-4	1 - 5
Stoddard solvent	8052-41-3	0.5 - 1.5
toluene	108-88-3	0.1 - 1
2-butanone oxime	96-29-7	0.1 - 1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

- Flammability of the product** : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
- Extinguishing media**
- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage

- Handling** : Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite. To avoid the risks of fires, all contaminated materials should be placed in a metal container filled with water and sealed. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside. Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not swallow. Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Vapors are heavier than air and may spread along floors. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store above the following temperature: 120F / 49C.

8 . Exposure controls/personal protection

Name	Result	ACGIH	OSHA	Ontario	Mexico	PPG
xylene	TWA	100 ppm	100 ppm	100 ppm	100 ppm	Not established
	STEL	150 ppm	Not established	150 ppm	150 ppm	Not established
Solvent naphtha (petroleum), medium aliph.	TWA	400 ppm	100 ppm 100 ppm	Not established	Not established	Not established
Ligroine	TWA	Not established	Not established	Not established	300 ppm	Not established
	STEL	Not established	Not established	Not established	400 ppm	Not established
ethylbenzene	TWA	20 ppm	100 ppm	20 ppm	100 ppm	Not established
	STEL	Not established	Not established	Not established	125 ppm	Not established
1,2,4-trimethylbenzene	TWA	25 ppm	Not established	25 ppm	25 ppm	Not established
	STEL	Not established	Not established	Not established	35 ppm	Not established
carbon black respirable	TWA	3 mg/m ³	3.5 mg/m ³	3 mg/m ³	3.5 mg/m ³	Not established
	STEL	Not established	Not established	Not established	7 mg/m ³	Not established
Stoddard solvent	TWA	100 ppm	500 ppm	100 ppm	100 ppm	Not established
	STEL	Not established	Not established	Not established	200 ppm	Not established
toluene	TWA	20 ppm	200 ppm Z	20 ppm	50 ppm S	Not established
	STEL	Not established	500 ppm Z A 300 ppm Z C	Not established	Not established	Not established
2-butanone oxime	TWA	Not established	Not established	Not established	Not established	3 ppm
	STEL	Not established	Not established	Not established	Not established	10 ppm

Key to abbreviations

A	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

Consult local authorities for acceptable exposure limits.

8 . Exposure controls/personal protection

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- Engineering measures** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Personal protection**
- Eyes** : Safety glasses with side shields.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Gloves** : For prolonged or repeated handling, use the following type of gloves:
Recommended: nitrile rubber
- Respiratory** : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : Closed cup: 21.67°C (71°F)
- Explosion limits** : Lower: 0.9%
- Color** : Not available.
- Odor** : Not available.
- pH** : Not available.
- Boiling/condensation point** : >37.78°C (>100°F)
- Melting/freezing point** : Not available.
- Specific gravity** : 0.93

9 . Physical and chemical properties

Density (lbs / gal)	: 7.76
Vapor pressure	: 1.1 kPa (8.2 mm Hg) [room temperature]
Vapor density	: Not available.
Volatility	: 6% (v/v), 58.18% (w/w)
Evaporation rate	: 0.61 (butyl acetate = 1)
Partition coefficient: n-octanol/water	: Not available.
% Solid. (w/w)	: 1.82

10 . Stability and reactivity

Stability	: Stable under recommended storage and handling conditions (see Section 7).
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Materials to avoid	: Reactive or incompatible with the following materials: oxidizing materials, strong acids, strong alkalis
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Xylene	LD50 Oral	Rat	4.3 g/kg	-
	LD50 Dermal	Rabbit	>1.7 g/kg	-
	LC50 Inhalation Vapor	Rat	5000 ppm	4 hours
Solvent naphtha (petroleum), medium aliph.	LD50 Oral	Rat	>5000 mg/kg	-
	LD50 Dermal	Rabbit	>3000 mg/kg	-
Ligroine	LC50 Inhalation	Rat	3400 ppm	4 hours
	LD50 Oral	Rat	8400 mg/kg	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LC50 Inhalation Vapor	Rat	4000 ppm	4 hours
	LD50 Oral	Rat	5 g/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation	Rat	18000 mg/m3	4 hours
	LD50 Oral	Rat	>15400 mg/kg	-
carbon black respirable	LD50 Dermal	Rabbit	>3 g/kg	-
	LD50 Oral	Rat	>5 g/kg	-
Stoddard solvent toluene	LD50 Oral	Rat	636 mg/kg	-
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LC50 Inhalation	Rat	49 g/m3	4 hours
2-butanone oxime	LD50 Oral	Rat	930 mg/kg	-
	LD50 Dermal	Rabbit	200 uL/kg	-

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Defatting irritant

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

11 . Toxicological information

Target organs : Contains material which causes damage to the following organs: brain, skin, central nervous system (CNS).
Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, liver, gastrointestinal tract, upper respiratory tract, ears, eye, lens or cornea, testes.

Carcinogenicity

Carcinogenicity : Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.

Classification

Product/ingredient name	ACGIH	IARC	NTP	OSHA
xylene	A4	3	-	-
ethylbenzene	A3	2B	-	-
carbon black respirable	A3	2B	-	-
toluene	A4	3	-	-

Carcinogen Classification code:
 ACGIH: A1, A2, A3, A4, A5
 IARC: 1, 2A, 2B, 3, 4
 NTP: Proven, Possible
 OSHA: +
 Not listed or regulated as a carcinogen: -

Developmental effects : Contains material which may cause developmental abnormalities, based on animal data.

Fertility effects : Contains material which may impair female fertility, based on animal data.

12 . Ecological information

Environmental effects : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
ethylbenzene	Acute LC50 150 to 200 mg/L Fresh water	Fish - Bluegill - Lepomis macrochirus	96 hours

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	TDG	Mexico	IMDG
UN number	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3
Packing group	II	II	II	II
Environmental hazards	No.	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	93.55	Not applicable.	Not applicable.	Not applicable.
RQ substances	(xylene, ethylbenzene)	Not applicable.	Not applicable.	Not applicable.

Additional information

- DOT** : Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
- TDG** : None identified.
- Mexico** : None identified.
- IMDG** : None identified.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. Regulatory information

United States inventory (TSCA 8b) : All components are listed or exempted.

Australia inventory (AICS) : At least one component is not listed.

Canada inventory (DSL) : At least one component is not listed in DSL but all such components are listed in NDSL.

China inventory (IECSC) : At least one component is not listed.

Europe inventory (REACH) : Please contact your supplier for information on the inventory status of this material.

Japan inventory (ENCS) : Not determined.

Korea inventory (KECI) : Not determined.

New Zealand (NZIoC) : Substance Use Restricted

Philippines inventory (PICCS) : At least one component is not listed.

United States**U.S. Federal regulations**

SARA 302/304: No products were found.

ERCLA: Hazardous substances.: toluene: 1000 lbs. (454 kg); ethylbenzene: 1000 lbs. (454 kg); xylene: 100 lbs. (45.4 kg); 2-butoxyethanol: No RQ is being assigned to the generic or broad class.;

SARA 311/312 SDS Distribution - Chemical Inventory - Hazard Identification:

<u>Chemical name</u>	<u>CAS #</u>	<u>Acute</u>	<u>Chronic</u>	<u>Fire</u>	<u>Reactive</u>	<u>Pressure</u>
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Product code QT110BK256/01

Date of issue 16 May 2014

Version 14

Product name BLACK ALKYD ENAMEL

15. Regulatory information

xylene	1330-20-7	Y	N	Y	N	N
Solvent naphtha (petroleum), medium aliph.	64742-88-7	Y	N	Y	N	N
Ligroine	8032-32-4	Y	N	Y	N	N
Solvent naphtha (petroleum), light aromatic	64742-95-6	Y	N	Y	N	N
ethylbenzene	100-41-4	Y	Y	Y	N	N
1,2,4-trimethylbenzene	95-63-6	Y	N	Y	N	N
carbon black respirable	1333-86-4	N	Y	N	N	N
Stoddard solvent	8052-41-3	Y	N	Y	N	N
toluene	108-88-3	Y	Y	Y	N	N
2-butanone oxime	96-29-7	Y	Y	Y	Y	N
Product as-supplied :		Y	Y	Y	N	N

SARA 313

Supplier notification

Chemical name	CAS number	Concentration
xylene	1330-20-7	10 - 30
ethylbenzene	100-41-4	1 - 5
1,2,4-trimethylbenzene	95-63-6	1 - 5

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Canada

WHMIS (Canada)

: Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

Mexico

Classification

Flammability : 3 Health : 2 Reactivity : 0

16. Other information

Hazardous Material Information System (U.S.A.)

Health : 2 * Flammability : 3 Physical hazards : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 2 Flammability : 3 Instability : 0

Date of previous issue : 3/16/2014.

Organization that prepared the MSDS : EHS

Indicates information that has changed from previously issued version.

Disclaimer

16 . Other information

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

Material Safety Data Sheet



Date of issue 16 May 2014

Version 27

1. Product and company identification

Product name : NEUTRAL ALKYD ENAMEL BASE
Code : QT110HC
Supplier : PPG Industries, Inc.
TrueFinishes
One PPG Place
Pittsburgh, PA 15272
Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
Technical Phone Number : 1-800-441-9695 (8:00 am to 5:00 pm EST)

2. Hazards identification

Emergency overview : DANGER!
FLAMMABLE LIQUID AND VAPOR. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY BE HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED. ASPIRATION HAZARD. CAN ENTER LUNGS AND CAUSE DAMAGE. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.
Keep away from flames, such as a pilot light, and any object that sparks, such as an electric motor. Keep away from heat. Do not smoke. Do not swallow. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation : May be harmful if inhaled. Irritating to respiratory system. Can irritate eyes, nose, mouth and throat.
Ingestion : May be harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.
Skin : Harmful in contact with skin. Irritating to skin.
Eyes : Irritating to eyes.

Over-exposure signs/symptoms

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone.

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See toxicological information (Section 11)

3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
xylene	1330-20-7	15 - 40
Solvent naphtha (petroleum), medium aliph. ethylbenzene	64742-88-7	7 - 13
Solvent naphtha (petroleum), light aromatic	100-41-4	5 - 10
1,2,4-trimethylbenzene	64742-95-6	1 - 5
2-butanone oxime	95-63-6	0.1 - 1
	96-29-7	0.1 - 1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

- Flammability of the product** : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
- Extinguishing media**
- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

6 . Accidental release measures

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage

- Handling** : Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite. To avoid the risks of fires, all contaminated materials should be placed in a metal container filled with water and sealed. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside. Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not swallow. Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Vapors are heavier than air and may spread along floors. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store above the following temperature: 120F / 49C.

8 . Exposure controls/personal protection

Name	Result	ACGIH	OSHA	Ontario	Mexico	PPG
xylene	TWA	100 ppm	100 ppm	100 ppm	100 ppm	Not established
	STEL	150 ppm	Not established	150 ppm	150 ppm	Not established
Solvent naphtha (petroleum), medium aliph.	TWA	400 ppm	100 ppm 100 ppm	Not established	Not established	Not established

8 . Exposure controls/personal protection

ethylbenzene	TWA	20 ppm	100 ppm	20 ppm	100 ppm	Not established
	STEL	Not established	Not established	Not established	125 ppm	Not established
1,2,4-trimethylbenzene	TWA	25 ppm	Not established	25 ppm	25 ppm	Not established
	STEL	Not established	Not established	Not established	35 ppm	Not established
2-butanone oxime	TWA	Not established	Not established	Not established	Not established	3 ppm
	STEL	Not established	Not established	Not established	Not established	10 ppm

Key to abbreviations

A	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

- Eyes** : Safety glasses with side shields.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Gloves** : For prolonged or repeated handling, use the following type of gloves:

Recommended: nitrile rubber

8 . Exposure controls/personal protection

- Respiratory** : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : Closed cup: 27.22°C (81°F)
- Explosion limits** : Lower: 1%
- Material supports combustion.** : Yes.
- Color** : Not available.
- Odor** : Not available.
- pH** : Not available.
- Boiling/condensation point** : >37.78°C (>100°F)
- Melting/freezing point** : Not available.
- Specific gravity** : 0.95
- Density (lbs / gal)** : 7.93
- Vapor pressure** : 0.89 kPa (6.7 mm Hg) [room temperature]
- Vapor density** : Not available.
- Volatility** : 64% (v/v), 56.84% (w/w)
- Evaporation rate** : 0.52 (butyl acetate = 1)
- Partition coefficient: n-octanol/water** : Not available.
- % Solid. (w/w)** : 43.16

10 . Stability and reactivity

- Stability** : Stable under recommended storage and handling conditions (see Section 7).
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
- Materials to avoid** : Reactive or incompatible with the following materials: oxidizing materials, strong acids, strong alkalis
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Xylene	LD50 Oral	Rat	4.3 g/kg	-
	LD50 Dermal	Rabbit	>1.7 g/kg	-
	LC50 Inhalation Vapor	Rat	5000 ppm	4 hours
Solvent naphtha (petroleum), medium aliph.	LD50 Oral	Rat	>5000 mg/kg	-
ethylbenzene	LD50 Dermal	Rabbit	>3000 mg/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LC50 Inhalation Vapor	Rat	4000 ppm	4 hours
Solvent naphtha (petroleum), light aromatic	LD50 Oral	Rat	8400 mg/kg	-
1,2,4-trimethylbenzene	LD50 Dermal	Rabbit	3.48 g/kg	-
	LD50 Oral	Rat	5 g/kg	-
2-butanone oxime	LC50 Inhalation	Rat	18000 mg/m3	4 hours
	LD50 Oral	Rat	930 mg/kg	-
	LD50 Dermal	Rabbit	200 uL/kg	-

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Defatting irritant

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Target organs

: Contains material which causes damage to the following organs: brain, skin, central nervous system (CNS).
Contains material which may cause damage to the following organs: kidneys, lungs, the nervous system, liver, gastrointestinal tract, upper respiratory tract, ears, eye, lens or cornea.

Carcinogenicity

Carcinogenicity : Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.

Classification

Product/ingredient name	ACGIH	IARC	NTP	OSHA
Xylene	A4	3	-	-
ethylbenzene	A3	2B	-	-

Carcinogen Classification code:
ACGIH: A1, A2, A3, A4, A5
IARC: 1, 2A, 2B, 3, 4
NTP: Proven, Possible
OSHA: +
Not listed or regulated as a carcinogen: -

12 . Ecological information

Environmental effects : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
ethylbenzene	Acute LC50 150 to 200 mg/L Fresh water	Fish - Bluegill - Lepomis macrochirus	96 hours

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	TDG	Mexico	IMDG
UN number	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3
Packing group	III	III	III	III
Environmental hazards	No.	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	77.7	Not applicable.	Not applicable.	Not applicable.
RQ substances	(xylene, ethylbenzene)	Not applicable.	Not applicable.	Not applicable.

Additional information

- DOT** : Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
- TDG** : None identified.
- Mexico** : None identified.
- IMDG** : None identified.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. Regulatory information

- United States inventory (TSCA 8b) : All components are listed or exempted.
 Australia inventory (AICS) : At least one component is not listed.
 Canada inventory (DSL) : At least one component is not listed in DSL but all such components are listed in NDSL.
 China inventory (IECSC) : At least one component is not listed.
 Europe inventory (REACH) : Please contact your supplier for information on the inventory status of this material.
 Japan inventory (ENCS) : Not determined.
 Korea inventory (KECI) : All components are listed or exempted.
 New Zealand (NZIoC) : At least one component is not listed.
 Philippines inventory (PICCS) : At least one component is not listed.

United States

U.S. Federal regulations :

SARA 302/304: No products were found.

ERCLA: Hazardous substances.: ethylbenzene: 1000 lbs. (454 kg); xylene: 100 lbs. (45.4 kg); 2-butoxyethanol: No RQ is being assigned to the generic or broad class.;

SARA 311/312 SDS Distribution - Chemical Inventory - Hazard Identification:

Chemical name	CAS #	Acute	Chronic	Fire	Reactive	Pressure
xylene	1330-20-7	Y	N	Y	N	N
Solvent naphtha (petroleum), medium aliph.	64742-88-7	Y	N	Y	N	N
ethylbenzene	100-41-4	Y	Y	Y	N	N
Solvent naphtha (petroleum), light aromatic	64742-95-6	Y	N	Y	N	N
2-butanone oxime	96-29-7	Y	Y	Y	Y	N
Product as-supplied :		Y	Y	Y	N	N

SARA 313

Supplier notification

Chemical name	CAS number	Concentration
xylene	1330-20-7	15 - 40
ethylbenzene	100-41-4	5 - 10

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Canada

WHMIS (Canada) : Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

Mexico

Classification

Flammability : 3 Health : 2 Reactivity : 0

16. Other information

Hazardous Material Information System (U.S.A.)

Health : 2 * Flammability : 3 Physical hazards : 0

(*) - Chronic effects

Product code QT110HC

Date of issue 16 May 2014

Version 27

Product name NEUTRAL ALKYD ENAMEL BASE

16 . Other information

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 2 Flammability : 3 Instability : 0

Date of previous issue : 3/13/2014.

Organization that prepared the MSDS : EHS

▣ Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

Material Safety Data Sheet



Date of issue 13 March 2014

Version 5

1. Product and company identification

Product name : PITT BULL SPRAY SAFETY RED
Code : 55-624
Supplier : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272
Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
Technical Phone Number : 1-800-441-9695 (8:00 am to 5:00 pm EST)

2. Hazards identification

Emergency overview : DANGER!
FLAMMABLE LIQUID AND VAPOR. CAUSES RESPIRATORY TRACT AND EYE IRRITATION. MAY BE HARMFUL IF INHALED OR SWALLOWED. ASPIRATION HAZARD. CAN ENTER LUNGS AND CAUSE DAMAGE. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.
Keep away from flames, such as a pilot light, and any object that sparks, such as an electric motor. Keep away from heat. Do not smoke. Do not swallow. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation : May be harmful if inhaled. Irritating to respiratory system. Can irritate eyes, nose, mouth and throat.
Ingestion : May be harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.
Skin : Moderately irritating to the skin.
Eyes : Irritating to eyes.

Over-exposure signs/symptoms

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone.

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See toxicological information (Section 11)

3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
acetone	67-64-1	10 - 30
propane	74-98-6	10 - 30
toluene	108-88-3	10 - 30
Butane	106-97-8	10 - 30
Solvent naphtha (petroleum), light aliph.	64742-89-8	1 - 5
Ligroine	8032-32-4	1 - 5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Extinguishing media

- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flames, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

6. Accidental release measures

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

- Handling** : Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite. To avoid the risks of fires, all contaminated materials should be placed in a metal container filled with water and sealed. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside. Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not swallow. Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Name	Result	ACGIH	OSHA	Ontario	Mexico	PPG
acetone	TWA	500 ppm	1000 ppm	500 ppm	1000 ppm	Not established
	STEL	750 ppm	Not established	750 ppm	1260 ppm	Not established
propane	TWA	Not established	1000 ppm	1000 ppm	Not established	Not established
toluene	TWA	20 ppm	200 ppm Z	20 ppm	50 ppm S	Not established
	STEL	Not	500 ppm Z A	Not	Not	Not

8 . Exposure controls/personal protection

		established	300 ppm Z C	established	established	established
Butane	TWA	Not established	Not established	800 ppm	800 ppm	Not established
	STEL	1000 ppm	Not established	Not established	Not established	Not established
Ligroine	TWA	Not established	Not established	Not established	300 ppm	Not established
	STEL	Not established	Not established	Not established	400 ppm	Not established

Key to abbreviations

A	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Eyes : Safety glasses with side shields.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Respiratory : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Product name PITT BULL SPRAY SAFETY RED

8 . Exposure controls/personal protection

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

Physical state : Liquid.
Flash point : Closed cup: -60°C (-76°F)
Explosion limits : Lower: 2.3%
Material supports combustion. : Yes.
Color : Not available.
Odor : Not available.
pH : Not available.
Boiling/condensation point : >37.78°C (>100°F)
Melting/freezing point : Not available.
Specific gravity : 0.72
Density (lbs / gal) : 6.01
Vapor pressure : 1.8 kPa (88.3 mm Hg) [room temperature]
Vapor density : Not available.
Volatility : 89% (v/v), 86.33% (w/w)
Evaporation rate : 0.32 (butyl acetate = 1)
Partition coefficient: n-octanol/water : Not available.
% Solid. (w/w) : 13.67

10 . Stability and reactivity

Stability : Stable under recommended storage and handling conditions (see Section 7).
Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Materials to avoid : Reactive or incompatible with the following materials: oxidizing materials, strong acids, strong alkalis
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

11 . Toxicological information**Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Acetone	LD50 Oral	Rat	1.8 g/kg	-
	LD50 Dermal	Rabbit	20 g/kg	-
	LC50 Inhalation Vapor	Rat	76000 mg/m3	4 hours
toluene.	LD50 Oral	Rat	636 mg/kg	-
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LC50 Inhalation	Rat	49 g/m3	4 hours
Butane	LC50 Inhalation	Rat	658000 mg/m3	4 hours
	LC50 Inhalation	Rat	3400 ppm	4 hours

Conclusion/Summary : Not available.

Chronic toxicity

11 . Toxicological information

- Conclusion/Summary** : Not available.
- Defatting irritant** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Target organs** : Contains material which causes damage to the following organs: brain, central nervous system (CNS).
Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, the reproductive system, liver, heart, upper respiratory tract, skin, eye, lens or cornea.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	NTP	OSHA
acetone	A4	-	-	-
toluene	A4	3	-	-

Carcinogen Classification code: ACGIH: A1, A2, A3, A4, A5
IARC: 1, 2A, 2B, 3, 4
NTP: Proven, Possible
OSHA: +
Not listed or regulated as a carcinogen: -

Teratogenicity

- Developmental effects** : Contains material which may cause developmental abnormalities, based on animal data.
- Fertility effects** : Contains material which may impair female fertility, based on animal data.

12 . Ecological information

- Environmental effects** : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
acetone	Acute LC50 >100000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours
	Acute LC50 6900 mg/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Acute EC50 7200000 ug/L Fresh water	Algae - Green algae - Selenastrum sp.	96 hours
toluene	Acute LC50 5800 ug/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss	96 hours
	Acute EC50 6000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Chronic NOEC 28000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	TDG	Mexico	IMDG
UN number	950	950	950	950
UN proper shipping name	AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS
Transport hazard class(es)	2.1	2.1	2.1	2.1
Packing group	III	III	III	III
Environmental hazards	No.	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	60.6	Not applicable.	Not applicable.	Not applicable.
RQ substances	Toluene, acetone)	Not applicable.	Not applicable.	Not applicable.

Additional information

- DOT** : Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
- TDG** : None identified.
- Mexico** : None identified.
- IMDG** : None identified.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. Regulatory information

- United States inventory (TSCA 8b)** : All components are listed or exempted.
- Australia inventory (AICS)** : Not determined.
- Canada inventory (DSL)** : All components are listed or exempted.
- China inventory (IECSC)** : Not determined.
- Europe inventory (REACH)** : Please contact your supplier for information on the inventory status of this material.
- Japan inventory (ENCS)** : Not determined.
- Korea inventory (KECI)** : Not determined.
- New Zealand (NZIoC)** : Not determined.
- Philippines inventory (PICCS)** : Not determined.

United States

U.S. Federal regulations :

SARA 302/304: No products were found.

ERCLA: Hazardous substances.: toluene: 1000 lbs. (454 kg); acetone: 5000 lbs. (2270 kg);

SARA 311/312 SDS Distribution - Chemical Inventory - Hazard Identification:

<u>Chemical name</u>	<u>CAS #</u>	<u>Acute</u>	<u>Chronic</u>	<u>Fire</u>	<u>Reactive</u>	<u>Pressure</u>
acetone	67-64-1	Y	N	Y	N	N
toluene	108-88-3	Y	Y	Y	N	N
propane	74-98-6	N	N	Y	N	Y
Butane	106-97-8	N	N	Y	N	Y
Solvent naphtha (petroleum), light aliph.	64742-89-8	Y	N	N	N	N
Ligroine	8032-32-4	Y	N	Y	N	N
Product as-supplied :		Y	Y	Y	N	N

SARA 313

Supplier notification

Chemical name

toluene

CAS number

108-88-3

Concentration

10 - 30

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada

WHMIS (Canada)

: Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

Mexico

Classification

Flammability : 4 Health : 2 Reactivity : 0

16. Other information

Hazardous Material Information System (U.S.A.)

Health : 2 * Flammability : 4 Physical hazards : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

16 . Other information

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 2 Flammability : 4 Instability : 0

Date of previous issue : 5/18/2011.

Organization that prepared the MSDS : EHS

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

Material Safety Data Sheet



Date of issue 13 March 2014
Version 5

1. Product and company identification

Product name : PITT BULL SPRAY SAFETY YELLOW
Code : 55-630
Supplier : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272
Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
Technical Phone Number : 1-800-441-9695 (8:00 am to 5:00 pm EST)

2. Hazards identification

Emergency overview : DANGER!
FLAMMABLE LIQUID AND VAPOR. CAUSES RESPIRATORY TRACT AND EYE IRRITATION. MAY BE HARMFUL IF INHALED OR SWALLOWED. ASPIRATION HAZARD. CAN ENTER LUNGS AND CAUSE DAMAGE. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.
Keep away from flames, such as a pilot light, and any object that sparks, such as an electric motor. Keep away from heat. Do not smoke. Do not swallow. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation : May be harmful if inhaled. Irritating to respiratory system. Can irritate eyes, nose, mouth and throat.
Ingestion : May be harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.
Skin : Moderately irritating to the skin.
Eyes : Irritating to eyes.

Over-exposure signs/symptoms

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone.

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See toxicological information (Section 11)

Product name PITT BULL SPRAY SAFETY YELLOW

3 . Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
acetone	67-64-1	10 - 30
propane	74-98-6	10 - 30
toluene	108-88-3	10 - 30
Butane	106-97-8	10 - 30
Ligroine	8032-32-4	1 - 5
Solvent naphtha (petroleum), light aliph.	64742-89-8	1 - 5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4 . First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5 . Fire-fighting measures

Flammability of the product : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Extinguishing media

Suitable : Use dry chemical, CO₂, water spray (fog) or foam.

Not suitable : Do not use water jet.

Special exposure hazards : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Hazardous combustion products : Decomposition products may include the following materials:
carbon oxides

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flames, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

6 . Accidental release measures

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage

- Handling** : Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite. To avoid the risks of fires, all contaminated materials should be placed in a metal container filled with water and sealed. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside. Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not swallow. Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8 . Exposure controls/personal protection

Name	Result	ACGIH	OSHA	Ontario	Mexico	PPG
acetone	TWA	500 ppm	1000 ppm	500 ppm	1000 ppm	Not established
	STEL	750 ppm	Not established	750 ppm	1260 ppm	Not established
propane	TWA	Not established	1000 ppm	1000 ppm	Not established	Not established
toluene	TWA	20 ppm	200 ppm Z	20 ppm	50 ppm S	Not established
	STEL	Not	500 ppm Z A	Not	Not	Not

8. Exposure controls/personal protection

		established	300 ppm Z C	established	established	established
Butane	TWA	Not established	Not established	800 ppm	800 ppm	Not established
	STEL	1000 ppm	Not established	Not established	Not established	Not established
Ligroine	TWA	Not established	Not established	Not established	300 ppm	Not established
	STEL	Not established	Not established	Not established	400 ppm	Not established

Key to abbreviations

A	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

Consult local authorities for acceptable exposure limits.

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Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Eyes : Safety glasses with side shields.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Respiratory : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Product name PITT BULL SPRAY SAFETY YELLOW

8 . Exposure controls/personal protection

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

Physical state : Liquid.
Flash point : Closed cup: -60°C (-76°F)
Explosion limits : Lower: 2.3%
Material supports combustion. : Yes.
Color : Not available.
Odor : Not available.
pH : Not available.
Boiling/condensation point : >37.78°C (>100°F)
Melting/freezing point : Not available.
Specific gravity : 0.73
Density (lbs / gal) : 6.09
Vapor pressure : 2.1 kPa (90.8 mm Hg) [room temperature]
Vapor density : Not available.
Volatility : 89% (v/v), 86.18% (w/w)
Evaporation rate : 0.42 (butyl acetate = 1)
Partition coefficient: n-octanol/water : Not available.
% Solid. (w/w) : 13.82

10 . Stability and reactivity

Stability : Stable under recommended storage and handling conditions (see Section 7).
Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Materials to avoid : Reactive or incompatible with the following materials: oxidizing materials, strong acids, strong alkalis
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

11 . Toxicological information**Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
acetone	LD50 Oral	Rat	1.8 g/kg	-
	LD50 Dermal	Rabbit	20 g/kg	-
	LC50 Inhalation Vapor	Rat	76000 mg/m3	4 hours
toluene	LD50 Oral	Rat	636 mg/kg	-
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LC50 Inhalation	Rat	49 g/m3	4 hours
Butane	LC50 Inhalation	Rat	658000 mg/m3	4 hours
	LC50 Inhalation	Rat	3400 ppm	4 hours

Conclusion/Summary : Not available.

Chronic toxicity

Product name PITT BULL SPRAY SAFETY YELLOW

11 . Toxicological information

- Conclusion/Summary** : Not available.
- Defatting irritant** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Target organs** : Contains material which causes damage to the following organs: brain, central nervous system (CNS).
Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, the reproductive system, liver, heart, upper respiratory tract, skin, eye, lens or cornea.

Carcinogenicity**Classification**

Product/ingredient name	ACGIH	IARC	NTP	OSHA
acetone	A4	-	-	-
toluene	A4	3	-	-

Carcinogen Classification code: ACGIH: A1, A2, A3, A4, A5
IARC: 1, 2A, 2B, 3, 4
NTP: Proven, Possible
OSHA: +
Not listed or regulated as a carcinogen: -

Teratogenicity

- Developmental effects** : Contains material which may cause developmental abnormalities, based on animal data.
- Fertility effects** : Contains material which may impair female fertility, based on animal data.

12 . Ecological information

- Environmental effects** : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
acetone	Acute LC50 >100000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours
	Acute LC50 6900 mg/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Acute EC50 7200000 ug/L Fresh water	Algae - Green algae - Selenastrum sp.	96 hours
toluene	Acute LC50 5800 ug/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss	96 hours
	Acute EC50 6000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Chronic NOEC 28000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	TDG	Mexico	IMDG
UN number	950	950	950	950
UN proper shipping name	AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS
Transport hazard class(es)	2.1	2.1	2.1	2.1
Packing group	II	II	II	II
Environmental hazards	No.	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	60.6	Not applicable.	Not applicable.	Not applicable.
RQ substances	Toluene, acetone)	Not applicable.	Not applicable.	Not applicable.

Additional information

DOT : Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

TDG : None identified.

Mexico : None identified.

IMDG : None identified.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. Regulatory information

- United States inventory (TSCA 8b) : All components are listed or exempted.
 Australia inventory (AICS) : Not determined.
 Canada inventory (DSL) : All components are listed or exempted.
 China inventory (IECSC) : Not determined.
 Europe inventory (REACH) : Please contact your supplier for information on the inventory status of this material.
 Japan inventory (ENCS) : Not determined.
 Korea inventory (KECI) : Not determined.
 New Zealand (NZIoC) : Not determined.
 Philippines inventory (PICCS) : Not determined.

United States

U.S. Federal regulations :

☑ SARA 302/304: No products were found.

☑ CERCLA: Hazardous substances.: toluene: 1000 lbs. (454 kg); acetone: 5000 lbs. (2270 kg);

SARA 311/312 SDS Distribution - Chemical Inventory - Hazard Identification:

Chemical name	CAS #	Acute	Chronic	Fire	Reactive	Pressure
☑ Acetone	67-64-1	Y	N	Y	N	N
toluene	108-88-3	Y	Y	Y	N	N
propane	74-98-6	N	N	Y	N	Y
Butane	106-97-8	N	N	Y	N	Y
Solvent naphtha (petroleum), light aliph.	64742-89-8	Y	N	N	N	N
Ligroine	8032-32-4	Y	N	Y	N	N
Product as-supplied :		Y	Y	Y	N	N

SARA 313

Supplier notification

Chemical name

☑ toluene

CAS number

108-88-3

Concentration

10 - 30

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada

WHMIS (Canada)

: Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

Mexico

Classification

Flammability : 4 Health : 2 Reactivity : 0

16. Other information

Hazardous Material Information System (U.S.A.)

Health : 2 * Flammability : 4 Physical hazards : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

Product code 55-630

Date of issue 13 March 2014

Version 5

Product name PITT BULL SPRAY SAFETY YELLOW

16 . Other information

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 2 Flammability : 4 Instability : 0

Date of previous issue : 5/18/2011.

Organization that prepared the MSDS : EHS

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

MATERIAL SAFETY DATA SHEET

F75CC2
10 00

DATE OF PREPARATION
Apr 3, 2013

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

F75CC2

PRODUCT NAME

SHER-KEM™ High Gloss Metal Finishing Enamel, Ultra Deep Base

MANUFACTURER'S NAME

THE SHERWIN-WILLIAMS COMPANY

101 Prospect Avenue N.W.

Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	www.oem.sherwin-williams.com
Regulatory Information	(216) 566-2902
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
<small>*for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)</small>	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
41	64742-88-7	Mineral Spirits		
		ACGIH TLV	100 PPM	2 mm
		OSHA PEL	100 PPM	
1	108-88-3	Toluene		
		ACGIH TLV	20 PPM	22 mm
		OSHA PEL	100 ppm (Skin)	
		OSHA PEL	150 ppm (Skin) STEL	
0.3	100-41-4	Ethylbenzene		
		ACGIH TLV	20 PPM	7.1 mm
		OSHA PEL	100 PPM	
		OSHA PEL	125 PPM STEL	
2	1330-20-7	Xylene		
		ACGIH TLV	100 PPM	5.9 mm
		ACGIH TLV	150 PPM STEL	
		OSHA PEL	100 PPM	
		OSHA PEL	150 PPM STEL	
2	64742-95-6	Light Aromatic Hydrocarbons		
		ACGIH TLV	Not Available	3.8 mm
		OSHA PEL	Not Available	
3	95-63-6	1,2,4-Trimethylbenzene		
		ACGIH TLV	25 PPM	2.03 mm
		OSHA PEL	25 PPM	
0.2	136-52-7	Cobalt 2-Ethylhexanoate		
		ACGIH TLV	Not Available	
		OSHA PEL	Not Available	
2	763-69-9	Ethyl 3-Ethoxypropionate		
		ACGIH TLV	Not Available	1.11 mm
		OSHA PEL	Not Available	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.

EYE or SKIN contact with the product, vapor or spray mist.

HMIS Codes

Health	2*
Flammability	3
Reactivity	0

EFFECTS OF OVEREXPOSURE**EYES:** Irritation.**SKIN:** Prolonged or repeated exposure may cause irritation.**INHALATION:** Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the urinary system
- the cardiovascular system
- the reproductive system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES**EYES:** Flush eyes with large amounts of water for 15 minutes. Get medical attention.**SKIN:** Wash affected area thoroughly with soap and water.

Remove contaminated clothing and launder before re-use.

INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.**INGESTION:** Do not induce vomiting. Get medical attention immediately.**SECTION 5 — FIRE FIGHTING MEASURES****FLASH POINT**

80 °F PMCC

LEL

0.7

UEL

7.0

FLAMMABILITY CLASSIFICATION

RED LABEL – Flammable, Flash below 100 °F (38 °C)

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.

Application to hot surfaces requires special precautions.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE**STORAGE CATEGORY**

DOL Storage Class IC

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are **FLAMMABLE**. Keep away from heat, sparks, and open flame.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally.

Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION**PRECAUTIONS TO BE TAKEN IN USE**

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m³ (total dust), 3 mg/m³ (respirable fraction), OSHA PEL 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	7.62 lb/gal	912 g/l
SPECIFIC GRAVITY	0.92	
BOILING POINT	222 - 395 °F	105 - 201 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	63%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)		
4.20 lb/gal	504 g/l	Less Water and Federally Exempt Solvents
4.20 lb/gal	504 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable**CONDITIONS TO AVOID**

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

Cobalt and cobalt compounds are classified by IARC as possibly carcinogenic to humans (group 2B) based on experimental animal data, however, there is inadequate evidence in humans for its carcinogenicity.

TOXICOLOGY DATA

CAS No.	Ingredient Name			
64742-88-7	Mineral Spirits	LC50 RAT LD50 RAT	4HR	Not Available Not Available
108-88-3	Toluene	LC50 RAT LD50 RAT	4HR	4000 ppm 5000 mg/kg
100-41-4	Ethylbenzene	LC50 RAT LD50 RAT	4HR	Not Available 3500 mg/kg
1330-20-7	Xylene	LC50 RAT LD50 RAT	4HR	5000 ppm 4300 mg/kg
64742-95-6	Light Aromatic Hydrocarbons	LC50 RAT LD50 RAT	4HR	Not Available Not Available
95-63-6	1,2,4-Trimethylbenzene	LC50 RAT LD50 RAT	4HR	Not Available Not Available
136-52-7	Cobalt 2-Ethylhexanoate	LC50 RAT LD50 RAT	4HR	Not Available Not Available
763-69-9	Ethyl 3-Ethoxypropionate	LC50 RAT LD50 RAT	4HR	Not Available Not Available

SECTION 12 — ECOLOGICAL INFORMATION**ECOTOXICOLOGICAL INFORMATION**

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS**WASTE DISPOSAL METHOD**

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

5 Liters (1.3 Gallons) and Less may be Classed as LTD. QTY. OR ORM-D

Larger Containers are Regulated as:

UN1263, PAINT, 3, PG III, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Xylenes (isomers and mixture) 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):

UN1263, PAINT, 3, PG III, (ERG#128)

Canada (TDG)

UN1263, PAINT, CLASS 3, PG III, LIMITED QUANTITY, (ERG#128)

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.

UN1263, PAINT, CLASS 3, PG III, (27 C c.c.), EmS F-E, S-E, ADR (D/E)

IATA/ICAO

UN1263, PAINT, 3, PG III

SECTION 15 — REGULATORY INFORMATION**SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION**

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
108-88-3	Toluene	1	
100-41-4	Ethylbenzene	0.3	
1330-20-7	Xylene	2	
95-63-6	1,2,4-Trimethylbenzene	3	
	Cobalt Compound	0.2	0.04

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

F77S12
15 00

DATE OF PREPARATION
Aug 8, 2011

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

F77S12

PRODUCT NAME

Quick Dry Enamel, Aluminum

MANUFACTURER'S NAME

THE SHERWIN-WILLIAMS COMPANY

101 Prospect Avenue N.W.

Cleveland, OH 44115

Telephone Numbers and Websites

Regulatory Information	(216) 566-2902
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
<small>*for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)</small>	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
22	64742-89-8	V. M. & P. Naptha		
		ACGIH TLV	300 PPM	12 mm
		OSHA PEL	300 PPM	
		OSHA PEL	400 PPM STEL	
3	64742-88-7	Mineral Spirits		
		ACGIH TLV	100 PPM	2 mm
		OSHA PEL	100 PPM	
19	108-88-3	Toluene		
		ACGIH TLV	20 PPM	22 mm
		OSHA PEL	100 ppm (Skin)	
		OSHA PEL	150 ppm (Skin) STEL	
3	100-41-4	Ethylbenzene		
		ACGIH TLV	100 PPM	7.1 mm
		ACGIH TLV	125 PPM STEL	
		OSHA PEL	100 PPM	
		OSHA PEL	125 PPM STEL	
14	1330-20-7	Xylene		
		ACGIH TLV	100 PPM	5.9 mm
		ACGIH TLV	150 PPM STEL	
		OSHA PEL	100 PPM	
		OSHA PEL	150 PPM STEL	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.
Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the urinary system
- the cardiovascular system
- the reproductive system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

HMIS Codes	
Health	2*
Flammability	3
Reactivity	1

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

SKIN: Wash affected area thoroughly with soap and water.

Remove contaminated clothing and laundry before re-use.

INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT

35 °F PMCC

LEL

0.9

UEL

7.0

FLAMMABILITY CLASSIFICATION

RED LABEL -- Flammable, Flash below 100 °F (38 °C)

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.

Application to hot surfaces requires special precautions.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class IB

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are FLAMMABLE. Keep away from heat, sparks, and open flame.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

To minimize the possibility of spontaneous combustion: control the accumulation of overspray; soak wiping rags and waste immediately after use in a water-filled, closed metal container; air dry filters outside, far from any combustible material and separated by bricks or other non-combustible spacers; dispose of all contaminated materials and waste properly. Consult OSHA 29 CFR 1910.107(b)(5) and NFPA 33, Chapter 8 (8-9) for the proper procedures.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m³ (total dust), 3 mg/m³ (respirable fraction), OSHA PEL 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits.

Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	7.73 lb/gal	926 g/l
SPECIFIC GRAVITY	0.93	
BOILING POINT	222 - 395 °F	105 - 201 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	70%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	N.A.	
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)		
	4.74 lb/gal	569 g/l
	4.74 lb/gal	569 g/l
		Less Water and Federally Exempt Solvents
		Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable**CONDITIONS TO AVOID**

None known.

INCOMPATIBILITY

Contamination with Water, Acids, or Alkalis can cause evolution of hydrogen, which may result in dangerously increased pressures in closed containers.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

TOXICOLOGY DATA

CAS No.	Ingredient Name			
64742-89-8	V. M. & P. Naphtha	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
64742-88-7	Mineral Spirits	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
108-88-3	Toluene	LC50 RAT	4HR	4000 ppm
		LD50 RAT		5000 mg/kg
100-41-4	Ethylbenzene	LC50 RAT	4HR	Not Available
		LD50 RAT		3500 mg/kg
1330-20-7	Xylene	LC50 RAT	4HR	5000 ppm
		LD50 RAT		4300 mg/kg

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

5 Liters (1.3 Gallons) and Less may be Classed as CONSUMER COMMODITY, ORM-D

Larger Containers are Regulated as:

UN1263, PAINT, 3, PG II, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Toluene 1000 lb RQ

Xylenes (isomers and mixture) 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):

RQ, UN1263, PAINT, 3, PG II, (XYLENES (ISOMERS AND MIXTURE)), (ERG#128)

Canada (TDG)

UN1263, PAINT, CLASS 3, PG II, (ERG#128)

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.

UN1263, PAINT, CLASS 3, PG II, (2 C c.c.), EmS F-E, S-E, ADR (D/E)

IATA/ICAO

UN1263, PAINT, 3, PG II

SECTION 15 — REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
108-88-3	Toluene	19	
100-41-4	Ethylbenzene	3	
1330-20-7	Xylene	14	

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

F77R14
12 00

DATE OF PREPARATION
Feb 10, 2014

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

F77R14

PRODUCT NAME

Quick Dry Enamel, LF Machinery Red

MANUFACTURER'S NAME

THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	www.oem.sherwin-williams.com
Regulatory Information	(216) 566-2902
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
<i>*for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)</i>	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
4	64742-89-8	V. M. & P. Naphtha		
		ACGIH TLV	300 PPM	12 mm
		OSHA PEL	300 PPM	
		OSHA PEL	400 PPM STEL	
29	108-88-3	Toluene		
		ACGIH TLV	20 PPM	22 mm
		OSHA PEL	100 ppm (Skin)	
		OSHA PEL	150 ppm (Skin) STEL	
4	100-41-4	Ethylbenzene		
		ACGIH TLV	20 PPM	7.1 mm
		OSHA PEL	100 PPM	
		OSHA PEL	125 PPM STEL	
22	1330-20-7	Xylene		
		ACGIH TLV	100 PPM	5.9 mm
		ACGIH TLV	150 PPM STEL	
		OSHA PEL	100 PPM	
		OSHA PEL	150 PPM STEL	
2	64742-95-6	Light Aromatic Hydrocarbons		
		ACGIH TLV	Not Available	3.8 mm
		OSHA PEL	Not Available	
3	95-63-6	1,2,4-Trimethylbenzene		
		ACGIH TLV	25 PPM	2.03 mm
		OSHA PEL	25 PPM	
0.5	13463-67-7	Titanium Dioxide		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

HMIS Codes

Health	2*
Flammability	3
Reactivity	0

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death. Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the urinary system
- the cardiovascular system
- the reproductive system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

SKIN: Wash affected area thoroughly with soap and water.

Remove contaminated clothing and laundry before re-use.

INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT

35 °F PMCC

LEL

0.7

UEL

7.0

FLAMMABILITY CLASSIFICATION

RED LABEL – Flammable, Flash below 100 °F (38 °C)

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.

Application to hot surfaces requires special precautions.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class IB

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are **FLAMMABLE**. Keep away from heat, sparks, and open flame.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally.

Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m³ (total dust), 3 mg/m³ (respirable fraction), OSHA PEL 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	7.77 lb/gal	931 g/l
SPECIFIC GRAVITY	0.94	
BOILING POINT	222 - 360 °F	105 - 182 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	72%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)		
5.18 lb/gal	621 g/l	Less Water and Federally Exempt Solvents
5.18 lb/gal	621 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY
--

STABILITY — Stable**CONDITIONS TO AVOID**

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
64742-89-8	V. M. & P. Naphtha	LC50 RAT LD50 RAT	4HR	Not Available Not Available
108-88-3	Toluene	LC50 RAT LD50 RAT	4HR	4000 ppm 5000 mg/kg
100-41-4	Ethylbenzene	LC50 RAT LD50 RAT	4HR	Not Available 3500 mg/kg
1330-20-7	Xylene	LC50 RAT LD50 RAT	4HR	5000 ppm 4300 mg/kg
64742-95-6	Light Aromatic Hydrocarbons	LC50 RAT LD50 RAT	4HR	Not Available Not Available
95-63-6	1,2,4-Trimethylbenzene	LC50 RAT LD50 RAT	4HR	Not Available Not Available
13463-67-7	Titanium Dioxide	LC50 RAT LD50 RAT	4HR	Not Available Not Available

SECTION 12 — ECOLOGICAL INFORMATION**ECOTOXICOLOGICAL INFORMATION**

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS**WASTE DISPOSAL METHOD**

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

5 Liters (1.3 Gallons) and Less may be Classed as LTD. QTY. OR ORM-D

Larger Containers are Regulated as:

UN1263, PAINT, 3, PG II, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Ethylbenzene 1000 lb RQ

Toluene 1000 lb RQ

Xylenes (isomers and mixture) 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):

RQ, UN1263, PAINT, 3, PG II, (XYLENES (ISOMERS AND MIXTURE)), (ERG#128)

Canada (TDG)

UN1263, PAINT, CLASS 3, PG II, LIMITED QUANTITY, (ERG#128)

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.

UN1263, PAINT, CLASS 3, PG II, (2 C c.c.), EmS F-E, S-E

IATA/ICAO

UN1263, PAINT, 3, PG II

SECTION 15 — REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
108-88-3	Toluene	29	
100-41-4	Ethylbenzene	4	
1330-20-7	Xylene	22	
95-63-6	1,2,4-Trimethylbenzene	3	

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

This form complies with OSHA Hazardous Communication Standard, 29 CFR 1910.1200.

SECTION I

Skysol®

Inland Technology Incorporated • 401 East 27th Street • Tacoma, WA 98421

Product Information: 1 (800) 552-3100

Transportation Emergencies: 1 (800) 255-3924

Date: April 26, 2013

MSDS No. 04129

Product Number: FS000

Synonyms: N/A

SECTION II - INGREDIENTS AND HAZARD IDENTIFICATION

Substances NOT considered hazardous by OSHA may also be listed.

COMPONENTS	CAS #	PEL	TLV	OTHER
C12-C13 Paraffinic Hydrocarbons	64742-48-9	Not listed	Not listed	
d-Limonene	5989-27-5	Not Listed	Not Listed	

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Initial Boiling Point: 340°F

Specific Gravity (H₂O=1): .77

Vapor Pressure (@ 25°C in mmHg): <1

Vapor Density (air=1): >5

Evaporation Rate (n-Butyl Acetate=1): <.1

Solubility: Not water soluble

Volatile by Volume: 100%

Appearance and Odor: Clear with mild citrus odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash point: 152°F PMCC

Flammable Limits: - LEL: 6% UEL: 7%

Extinguishing Media: Foam, water spray, dry chemical, carbon dioxide.

Special Fire Fighting Procedures: Wear air supplied breathing equipment for enclosed and confined spaces or as otherwise needed.

Unusual Fire and Explosion Hazards: None known.

SECTION V - REACTIVITY DATA

Chemical Incompatibility: Avoid contact with strong acids and strong oxidizing agents.

Hazardous Decomposition Products: CO₂, CO and hydrocarbons

Hazardous Polymerization: Will not occur

Stability: Stable

MATERIAL SAFETY DATA SHEET: Skysol®

Inland Technology Incorporated

Product Information: (800) 552-3100

Transportation Emergencies: (800) 255-3924

SECTION VI - HEALTH HAZARD DATA

Signs and Symptoms of Overexposure

Acute Health Effects: Product contacting eyes may cause eye irritation. Low order acute oral and dermal toxicity.

Chronic Health Effects: Prolonged or repeated skin exposure can lead to mild irritation, defatting and dermatitis.

Carcinogenic Ingredients: None

Primary Routes of Entry: Skin, eyes and inhalation.

Medical Conditions Aggravated by Exposure: May aggravate existing dermatitis.

Emergency and First-Aid Procedures:

Eyes: If eye contact occurs, flush with water for at least 15 minutes or until irritation subsides. If irritation persists, contact physician.

Skin: In case of skin contact, remove any contaminated clothing and wash skin thoroughly with soap and water.

Inhalation: If overcome by vapor, remove from exposed area and call physician immediately.

Ingestion: DO NOT induce vomiting; call physician immediately.

If conditions persist get medical attention

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to Take in Case Material is Released: Shut off and eliminate all ignitable sources. Contain and collect material. Absorb residue.

Waste Disposal Method: Contact federal, state, county or local environmental regulatory agencies for guidance.

Handling and Storage: Use and store away from heat, sparks, and open flame. Keep container sealed when not in use.

SECTION VIII - CONTROL MEASURES

Personal Protection Equipment

Respirator: None normally required.

Gloves: Use chemical resistant gloves.

Eye Protection: Use splash goggles or face shield when eye contact may occur.

Other Protective Equipment: None normally required.

Workplace Considerations

Ventilation: Mechanical ventilation not normally required, unless product is heated or atomized in a confined space.

Engineering Controls: Eye wash or sterile eye rinse. Keep container closed. Do not store near heat, flame or other ignition sources.

Work Practices: Read and understand all cautions, labels, and MSDS before using this product.

Hygiene Practices: Do not have food or drink in the vicinity. Minimize breathing vapor or mist. Avoid prolonged or repeated contact with skin. Wash contaminated clothing before reuse.

Keep All Chemicals Out of the Reach of Children.

The information and recommendations contained herein are presented in good faith and believed to be correct and reliable to the best of Inland Technology's knowledge. Inland Technology, or its distributors, do not warrant or guarantee reliability, and shall not be liable for any loss or damage arising out of the use thereof. Contact Inland to confirm, in advance of need, that the information is current, applicable, and suitable to each circumstance.

MATERIAL SAFETY DATA SHEET

This form complies with OSHA Hazardous Communication Standard, 29 CFR 1910.1200

SECTION I

EP-921™

Inland Technology Incorporated • 401 East 27th Street • Tacoma, WA 98421

Product Information: 1-800-552-3100

Transportation Emergencies: 1-800-255-3924

Date: April 26, 2013

MSDS No. 04112

Product Number: FE921

Synonyms: NSNs: 6850-01-381-4408 & 6850-01-381-3300

SECTION II - INGREDIENTS AND HAZARD IDENTIFICATION

Substances NOT considered hazardous by OSHA may also be listed

COMPONENTS	CAS #	PEL	TLV	OTHER
Tripropylene glycol methyl ether	25498-49-1	Not Listed	Not Listed	
Propylene Carbonate	108-32-7	Not Listed	Not Listed	
d-Limonene	5989-27-5	Not Listed	Not Listed	

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Initial Boiling Point: 340 F

Specific Gravity (H₂O=1): .98

Vapor Pressure (@ 25°C in mmHg): <1

Vapor Density (air=1): >4.7

Evaporation Rate (n-Butyl Acetate=1): <.02

Solubility: Very slight (water)

Volatile by Volume: 17%

Appearance and Odor: Clear with mild citrus odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash point: 146°F PMCC

Flammable Limits: - LEL: 7% UEL: 6.1

Extinguishing Media: Foam, water spray, dry chemical, carbon dioxide.

Special Fire Fighting Procedures: Wear positive-pressure, self-contained breathing apparatus. Cool container with spray if possible.

Unusual Fire and Explosion Hazards: Auto ignition temperature approximately 460°F.

SECTION V - REACTIVITY DATA

Chemical Incompatibility: Avoid contact with strong acids and strong oxidizing agents.

Hazardous Decomposition Products: N/A

Hazardous Polymerization: Will not occur

Stability: Stable

MATERIAL SAFETY DATA SHEET: EP-921™

Inland Technology Incorporated

Product Information: (800) 552-3100

Transportation Emergencies: (800) 255-3924

SECTION VI - HEALTH HAZARD DATA

Signs and Symptoms of Overexposure

Acute Health Effects: Products contacting the eyes may cause eye irritation. Prolonged skin contact may cause redness and irritation. Swallowing large amounts can cause gastrointestinal disturbances.

Chronic Health Effects: Prolonged or repeated skin exposure can lead to mild irritation, defatting and dermatitis.

Carcinogenic Ingredients: None known

Primary Routes of Entry: Skin, and eyes.

Medical Conditions Aggravated by Exposure: None known.

Emergency and First-Aid Procedures:

Eyes: If eye contact occurs, flush with water for at least 15 minutes or until irritation subsides. If irritation persists contact physician.

Skin: In case of skin contact, remove any contaminated clothing and wash skin thoroughly with soap and water.

Inhalation: If overcome by vapor, remove from exposed area and call physician immediately.

Ingestion: DO NOT induce vomiting; call physician immediately.

If conditions persist get medical attention.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to Take in Case Material is Released: Shut off and eliminate all ignitable sources. Contain and collect material. Absorb residue.

Waste Disposal Method: Contact federal, state, county or local environmental regulatory agencies for guidance.

Handling and Storage: Use and store away from heat, sparks, and open flame. Keep container sealed when not in use.

SECTION VIII - CONTROL MEASURES

Personal Protection Equipment

Respirator: Approved organic respirator if excessive mist or vapors are created.

Gloves: Use solvent-resistant gloves.

Eye Protection: Use splash goggles or face shield when eye contact may occur.

Other Protective Equipment: Boots, coveralls, aprons as necessary to prevent skin contact.

Workplace Considerations

Ventilation: Mechanical ventilation not normally required, unless product is heated, and/or is atomized in a confined space.

Engineering Controls: Eye wash or sterile eye rinse. Keep container closed. Do not store near heat or flame.

Work Practices: Read and understand all cautions, labels, and MSDS before using this product.

Hygiene Practices: Do not have food in the vicinity. Minimize breathing vapor or mist. Avoid prolonged or repeated contact with skin. Wash contaminated clothing before reuse.

Keep All Chemicals Out of the Reach of Children.

The information and recommendations contained herein are presented in good faith and believed to be correct and reliable to the best of Inland Technology's knowledge. Inland Technology, or its distributors, do not warrant or guarantee reliability, and shall not be liable for any loss or damage arising out of the use thereof. Contact Inland to confirm, in advance of need, that the information is current, applicable, and suitable to each circumstance.



ATTACHMENT E – SUPPORTING CALCULATIONS

Table 1
EMISSION SUMMARY
S.P.M. Flow Control, Inc.
52 Norwins Drive
Buckhannon, West Virginia 26201
Terracon Project No. 94137584

Potential to Emit

UNIT NAME	Emission Sources	Control	Emission Point	MAX OPERATING SCHEDULE ⁽¹⁾	VOC EMISSIONS		PM EMISSIONS		HAPs		NOx		CO		SO ₂	
				HOURS/YR	TPY	LBS/HR	TPY	LBS/HR								
Paint Booth ⁽²⁾	1S	1C	1E	3,650	9.5783	5.2484	3.4045	1.8955	7.2361	3.9650	--	--	--	--	--	--
Parts Washers ⁽³⁾	2S, 3S, & 4S	NA	2E, 3E, & 4E	8,760	0.1926	0.4013	--	--	--	--	--	--	--	--	--	--
Paint Gun Cleaner ⁽³⁾	5S	NA	1E	3,950	0.0208	0.0868	--	--	--	--	--	--	--	--	--	--
Totals					9.7917	5.7364	3.4045	1.8955	7.2361	3.9650	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

- Notes:
1. Maximum operating schedule is 24 hours/day and 365 days/year.
 2. Basis for calculation of Volatile organic compound (VOC), Particulate Matter (PM), and Hazardous Air Pollutants (HAPs) emissions provided in Table 3.
 3. Emissions calculated from maximum expected usage of paint gun cleaner and parts washer solvents.

Unit Abbreviations
 LBS/HR - pounds per hour
 TPY - tons per year

Expected Actual Emissions

UNIT NAME	Emission Sources	Control	Emission Point	EXPECTED OPERATING SCHEDULE ⁽⁴⁾	VOC EMISSIONS		PM EMISSIONS		HAPs		NOx		CO		SO ₂	
				HOURS/YR	TPY	LBS/HR	TPY	LBS/HR								
Paint Booth ⁽⁵⁾	1S	1C	1E	1,300	3.4114	5.2484	0.0029	0.0044	2.5773	3.9650	--	--	--	--	--	--
Parts Washers ⁽⁶⁾	2S, 3S, & 4S	NA	2E, 3E, & 4E	8,760	0.1926	0.4013	--	--	--	--	--	--	--	--	--	--
Paint Gun Cleaner ⁽⁷⁾	5S	NA	1E	1,300	0.0208	0.0868	--	--	--	--	--	--	--	--	--	--
Totals					3.6248	5.7364	0.0029	0.0044	2.5773	3.9650	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

- Notes:
4. Actual paint spray operations are expected for 4.167 hours per day, 6 days per week and 52 weeks per year.
 5. Volatile organic compound (VOC), Particulate Matter (PM), and Hazardous Air Pollutants (HAPs) emissions have been calculated based on expected hours of operation.
 6. Emissions calculated from maximum expected usage of paint gun cleaner and parts washer solvents.

Unit Abbreviations
 LBS/HR - pounds per hour
 TPY - tons per year



Table 2
SPECIATED PAINT EMISSIONS
 S.P.M. Flow Control, Inc.
 52 Norwins Drive
 Buckhannon, West Virginia 26201
 Terracon Project No. 94137584

COATING NAME/CONTENT	Coating Specification				VOC Emissions in Paint			PM Emissions in Paint				
	CAS NUMBER	MAX CONTENT PERCENT (%)	HAP, TAPE ⁽¹⁾	PRODUCT DENSITY (LBS/CAL ⁽²⁾)	VOC CONTENT (LBS/CAL ⁽²⁾)	AVG SOLIDS CONTENT (LBS/CAL ⁽³⁾)	MAX HOURLY COATING USED (GALS/HR ⁽⁴⁾)	MAX ANNUAL COATING USED (GALS/YR ⁽⁴⁾)	ANNUAL VOC EMISSIONS (TONS/YEAR ⁽⁵⁾)	HOURLY VOC EMISSIONS (LBS/HR ⁽⁶⁾)	ANNUAL PM EMISSIONS (TONS/YEAR ⁽⁷⁾)	HOURLY PM EMISSIONS (LBS/HR ⁽⁷⁾)
FSC16013 Aik FD EN Gray Primer				8.8	5.02	3.78	1.00	405.56	1.0188	5.0240	0.26799	1.32160
Ligroine	8032324	30.00%		--	--	--	--	--	0.6353	2.6400	--	--
Xylene	1330207	30.00%	H	--	--	--	--	--	0.6353	2.6400	--	--
Talc	14867966	7.00%		--	--	--	--	--	--	--	0.04372	0.21560
Kaolin	1332587	7.00%		--	--	--	--	--	0.1249	0.6160	--	--
Solvent naphtha, light aromatic	64742956	7.00%		--	--	--	--	--	0.1249	0.6160	--	--
Titanium Dioxide	13463677	7.00%		--	--	--	--	--	--	--	0.04372	0.21560
Ethylbenzene	100414	5.00%	H	--	--	--	--	--	0.0892	0.4400	--	--
1,2,4-Trimethylbenzene	95636	5.00%	H	--	--	--	--	--	0.0892	0.4400	--	--
Stoddard Solvent	8052413	1.50%		--	--	--	--	--	0.0288	0.1320	--	--
Toluene	108883	1.00%	H	--	--	--	--	--	0.0178	0.0880	--	0.03080
Carbonyl Black	1333964	1.00%		--	--	--	--	--	--	--	0.00625	--
2-butanone oxime	96297	1.00%		--	--	--	--	--	0.0178	0.0880	--	--
Cumene	96828	1.00%		--	--	--	--	--	0.0178	0.0880	--	--
44908 WR Black Enamel				8.57	3.24	5.33	1.00	405.56	0.6570	3.2400	0.37828	1.86550
2-Butoxy Ethanol	111762	13.80%		--	--	--	--	--	--	--	8.394E-02	4.139E-01
QT110BK25601 Black Alkyd Enamel				7.76	4.51	3.25	1.00	405.56	0.9155	4.5148	0.23032	1.13563
Xylene	1330207	30.00%	H	--	--	--	--	--	0.4721	2.3280	--	--
Solvent naphtha, medium aliphatic	64742887	13.00%		--	--	--	--	--	0.2046	1.0088	--	--
Ligroine	8032324	13.00%		--	--	--	--	--	0.2046	1.0088	--	--
Solvent naphtha, light aromatic	64742956	7.00%		--	--	--	--	--	0.1101	0.5432	--	--
Ethylbenzene	100414	5.00%	H	--	--	--	--	--	0.0787	0.3880	--	--
1,2,4-Trimethylbenzene	95636	5.00%	H	--	--	--	--	--	0.0787	0.3880	--	--
Carbonyl Black	1333964	1.00%		--	--	--	--	--	--	--	0.00551	0.02716
Stoddard Solvent	8052413	1.50%		--	--	--	--	--	0.0236	0.1164	--	--
Toluene	108883	1.00%	H	--	--	--	--	--	0.0157	0.0776	--	--
2-butanone oxime	96297	1.00%		--	--	--	--	--	0.0157	0.0776	--	--



Table 2
SPECIATED PAINT EMISSIONS
 S.P.M. Flow Control, Inc.
 52 Norwinds Drive
 Buckhannon, West Virginia 26201
 Terracon Project No. 94137584

COATING NAME/CONTENT	Coating Specification					VOC Emissions in Paint			P.M. Emissions in Paint			
	CAS NUMBER	MAX. COATING PERCENT (%)	HAP, TAP ^(a)	PRODUCT DENSITY (LBS/GAL) ^(b)	VOC CONTENT (LBS/GAL) ^(c)	AVG. SOLIDS CONTENT (LBS/GAL) ^(d)	MAX. HOURLY COATING USED (GALS/HR) ^(e)	MAX. ANNUAL COATING USED (GALS/YR) ^(f)	ANNUAL VOC EMISSIONS, TONS/YEAR ^(g)	HOURLY VOC EMISSIONS, LBS/HR ^(h)	ANNUAL PM EMISSIONS, TONS/YEAR ⁽ⁱ⁾	HOURLY PM EMISSIONS, LBS/HR ^(j)
QT110HC Neutral Alky Enamel Base												
Xylene	1330207	40.00%	H	7.93	4.51	3.42	1.00	405.56	0.914	4.5074	0.24291	1.19791
Solvent Naphth - Medium Aliphatic	64742887	13.00%							0.6432	3.1720		
Ethylbenzene	100414	10.00%	H						0.2090	1.0309		
Solvent Naphth - Light Aromatic	64742956	5.00%							0.0804	0.3965		
1,1,4-trimethylbenzene	96536	1.00%							0.0161	0.0793		
2-butanone oxime	96297	5.00%							0.0804	0.3965		
55-624 Pitt Bull Spray Safety Red												
Acetone	67641	30.00%		6.01	5.19	0.82	1.00	405.56	1.0521	5.1884	0.05631	0.28755
Propene	74986	30.00%							0.3656	1.8030		
Toluene	108883	30.00%	H						0.3656	1.8030		
Butane	108978	50.00%							0.3656	1.8030		
Solvent naphtha, light aliphatic	64742898	5.00%							0.0609	0.3005		
Ligroine	8032324	5.00%							0.0609	0.3005		
55-630 Pitt Bull Spray Safety Yellow												
Acetone	67641	30.00%		6.09	5.25	0.84	1.00	405.56	1.0643	5.2484	0.05973	0.29457
Propane	74986	30.00%							0.3705	1.8270		
Toluene	108883	30.00%	H						0.3705	1.8270		
Butane	108978	30.00%							0.3705	1.8270		
Solvent naphtha, light aliphatic	64742898	5.00%							0.0617	0.3045		
Ligroine	8032324	5.00%							0.0617	0.3045		
High Gloss Metal Finishing Enamel, Ultra Deep Base												
Mineral Spirits	64742887	41.00%		7.82	4.20	3.42	1.00	405.56	0.8517	4.2000	0.24273	1.19700
Toluene	108883	1.00%	H						0.6335	3.1242		
Ethylbenzene	100414	0.30%	H						0.0155	0.0762		
Xylene	1330207	2.00%	H						0.0046	0.0229		
Light Aromatic Hydrocarbons	64742956	2.00%							0.0309	0.1524		
1,2,4-Trimethylbenzene	96536	3.00%							0.0309	0.1524		
Cobalt 2-Ethylhexanoate	136527	0.20%							0.0464	0.2286		
Ethyl 35-Ethoxypropionate	783699	2.00%									1.08E-03	5.39E-03
FTFS12 Quick Dry Enamel, Aluminium												
Vinyl Naphth	64742887	22.00%		7.73	4.74	2.99	1.00	405.56	0.9512	4.7400	0.21221	1.04650
Mineral Spirits	64742887	3.00%	H						0.0470	1.7096		
Toluene	108883	19.00%	H						0.2978	1.4887		
Ethylbenzene	100414	3.00%	H						0.0470	0.2319		
Xylene	1330207	14.00%							0.2194	1.0822		



Table 2
SPECIATED PAINT EMISSIONS
 S.P.M. Flow Control, Inc.
 52 Norwinds Drive
 Buckhannon, West Virginia 26201
 Terracon Project No. 94137584

COATING NAME/CONTENT	CAS NUMBER	MAX CONTENT PERCENT (%)	HAP, TAP ⁽³⁾	PRODUCT DENSITY (LBS/GAL) ⁽³⁾	VOC CONTENT (LBS/GAL) ⁽³⁾	AVG SOLIDS CONTENT (LBS/GAL) ⁽³⁾	MAX HOURLY COATING USED (GALS/HR) ⁽³⁾	MAX ANNUAL COATING USED (GALS/YR) ⁽³⁾	VOC Emissions in Paint			PM Emissions in Paint		
									ANNUAL VOC EMISSIONS (TONS/YEAR) ⁽³⁾	HOURLY VOC EMISSIONS (LBS/HR) ⁽³⁾	ANNUAL PM EMISSIONS (TONS/YEAR) ⁽³⁾	HOURLY PM EMISSIONS (LBS/HR) ⁽³⁾		
F77R14 Quick Dry Enamel, LF Machinery Red														
VM&P Naptha	64742898	4.00%		7.77	6.18	2.59	1.00	405.56	1.0504	5.1800	0.18382	0.30650		
Toluene	108883	29.00%	H						0.0630	0.3108				
Ethylbenzene	100414	4.00%							0.4569	2.2533				
Xylene	1330207	22.00%							0.0630	0.3108				
Light Aromatic Hydrocarbons	64742856	2.00%							0.3466	1.7094				
1,2,4-Trimeethylbenzene	95536	3.00%							0.0315	0.1554				
Titanium Dioxide	13453677	0.50%	H						0.0473	0.2331				

Notes:

- Percent content is considered as the maximum value of the range provided in the MSDS.
- "HAP/H" stands for Hazardous Air Pollutant. "TAP/T" for Toxic Air Pollutants.
- Product Density & Volatile Organic Compound (VOC) (less water and federally exempt solvents) content are obtained from the MSDS.
- Average solids content is determined as the difference between the total density of the coating and the volatile content provided in the MSDS sheet.
- The coating usage rate in gallons/hr and gallons/year is estimated.
- The VOC emissions in the booth includes emissions from coating as well as drying.
- The Particulate Matter (PM) emissions are calculated based on an assumed transfer efficiency of 65%. Fall out factor of 80% & control efficiency of filter of 98.81% not considered for PTE calculations.

Sample Calculations (F77R14 Quick Dry Enamel, LF Machinery Red)

Annual VOC Emissions (Tons/Year)
 = (VOC content (lbs/gallon) * Max Coating used per year (gallons/year))/2000
 = (5.18 lbs/gallon * 405.56 gallons/year)/2000
 = 1.0504 tons/year

Hourly VOC Emissions (lbs/hour)
 = VOC content (lbs/gallon) * Max Coating used per hour (gallons/hour)
 = 5.18 lbs/gallon * 1 gallons/year
 = 5.18 lbs/hour

Component Annual VOC Emissions (Tons/Year) - Eg. Light Aromatic Hydrocarbons
 = (Component Content (%) * Paint or Component density (lbs/gallon) * Max Coating used per Year (gallons/year))/2000
 = (0.02 * 7.77 lbs/gallon * 405.56 gallons/year)/2000 = 0.0315 tons/year

Component Hourly VOC Emissions (Pounds/Hour) - Eg. Light Aromatic Hydrocarbons
 = (Component Content (%) * Paint or Component density (lbs/gallon) * Max Coating used per hour (gallons/hour))
 = (0.02 * 7.77 lbs/gallon * 1 gallons/hour) = 0.1554 lbs/hour

Sample Calculations (F77R14 Quick Dry Enamel, LF Machinery Red)

Annual PM₁₀ Emissions (Tons/Year)
 = (Solids content (lbs/gallon)*Max Coating used per year (gallons/year))/(1-TE)*(1-FF)*(1-FE)/2000
 = 2.59 lbs/gallon * 405.56 gallons/year * (1-0.65) * (1-0) * (1-0)/2000
 = 0.16382 tons/year

Hourly PM₁₀ Emissions (lbs/hour)
 = (Solids content (lbs/gallon)*Max Coating used per hour(gallons/hour))/(1-TE)*(1-FF)*(1-FE)
 = 2.59 lbs/gallon * 1 gallons/hour * (1-0.65) * (1-0) * (1-0)
 = 0.8065 lbs/hour

Component Annual PM₁₀ Emissions (Tons/Year) - Eg. Titanium Dioxide
 = (Component Content (%) * Paint or Component density (lbs/gallon) * Max Coating used per Year (gallons/year)) * (1-65)*(1-0)*(1-0)/2000
 = 0.005 * 7.77 lbs/gallon * 405.56 gallons/year * Efficiency Factors/2000 = 0.00276 tons/year

Component Hourly PM₁₀ Emissions (Pounds/Hour) - Eg. Titanium Dioxide
 = (Component Content (%) * Paint or Component density (lbs/gallon) * Max Coating used per hour (gallons/hour)) * (1-65)*(1-0)*(1-0)
 = 0.005 * 7.77 lbs/gallon * 1 gallons/hour * Efficiency Factors = 0.0136 lbs/hour

Table 3
PAINT EMISSIONS (PTE)
S.P.M. Flow Control, Inc.
52 Norwins Drive
Buckhannon, West Virginia 26201
Terracon Project No. 94137584

Maximum Hourly Coating Used¹	=	1.00	gallons per hour
Maximum Paint Booth Spray time per Hour¹	=	25.00	minutes per hour
Total spray time in a year with physical restrictions (25 min spray per hour)	=	3,650.00	hours per year
Maximum Gallons of Coating Material Used per Year	=	3,650.00	gallons per year
Max Coating VOC Content			
(55-630 Pitt Bull Spray Safety Yellow)			
Highest VOC	=	5.25	pounds per gallon
Max Yearly VOC	=	19156.52	pounds per year
	=	9.5783	TPY
Max Coating Per Hour	=	1.00	gallons per hour
Max VOC Per Hour	=	5.2484	pounds per hour
Max Coating PM Content			
(44B08 WR Black Enamel)			
Highest PM	=	5.33	pounds per gallon
Max Yearly PM	=	6809.08	pounds per year
	=	3.4045	TPY
Max Coating Per Hour	=	1.00	gallons per hour
Max PM Per Hour	=	1.8655	pounds per hour
Max Coating HAP/TAP Content			
(QT110HC Neutral Alky Enamel Base)			
Highest HAP	=	3.97	pounds per gallon
Max Yearly HAP	=	14472	pounds per year
	=	7.2361	TPY
Max Coating Per Hour	=	1.00	gallons per hour
Max HAP Per Hour	=	3.9650	pounds per hour

Notes:

1. For calculating emissions from the paint booth, the average spray rate of the gun is considered to be one gallon per hour. It is estimated that it will take approximately 25 minutes to paint the iron parts or pumps and allow them to dry. Rest of the time in an hour will be spent in preparation, loading, and unloading operations.

2

Transfer Efficiency (TE) 65.00%
Fall Out Factor (FF) 0.00%
Filter Control Efficiency (FE) 0.00%

PTE
PTE

Unit Abbreviations
TPY

tons per year

Table 4
FUGITIVE EMISSIONS
S.P.M. Flow Control, Inc.
52 Norwinds Drive
Buckhannon, West Virginia 26201
Terracon Project No. 94137584

EPN	Item	Total Annual VOC Emissions (lbs/hr)	Total Annual VOC Emissions (tons/year)	Annual Throughput (gal/yr)	Throughput (gal/day)	Throughput (gal/hr)
2E, 3E, & 4E	Parts Washer (three units)	0.4013	0.1926	60	1.5	0.0625
1E	Clean-up solvents - Paint gun cleaner	0.0868	0.0208	30	1.50	0.063
	Total	0.4881	0.2134			

Notes

1	Operation Hours					
	1 Year	=	52 Weeks			
	1 Week	=	7 Days			
	1 Day	=	24 Hours			
2	Parts Washing (Skysol)					
	Solvent purchased	=	80 Gallons			
	Disposed solvent	=	20 Gallons (estimated)			
	Amount Used	=	60 Gallons			
3	Paint gun clean-up solvent (EP-921)					
	Clean-up solvent purchased	=	50 Gallons			
	Disposed clean-up solvent	=	20 Gallons (estimated)			
	Amount Used	=	30 Gallons			

COATING NAME/CONTENT	CAS NUMBER	MAX CONTENT PERCENT%	HAPs	Coating Specifications					VOC Emissions			PM Emissions		
				PRODUCT DENSITY LBS/GAL (7)	AVG VOC CONTENT LBS/GAL (8)	AVG SOLIDS CONTENT LBS/GAL (9)	MAX HOURLY USAGE GALLONS (10)	MAX ANNUAL EVAPORATED GALLONS (11)	ANNUAL VOC EMISSIONS TONS/YEAR (12)	ANNUAL VOC EMISSIONS LBS/YEAR (13)	PM ₁₀ EMISSIONS TONS/YEAR (14)	PM _{2.5} EMISSIONS LBS/YEAR (15)		
Skysol Solvent (Parts Washing)														
C12-13 Paraffinic	64742489	99.5%	--	6.42	6.42	0.00	0.0625	80	0.1926	0.4013	0.00	0.00		
Hydrocarbons	5989275	0.30%	--	--	--	--	--	--	0.0058	0.0012	--	--		
<i>o</i> -Limonene									0.0208	0.0868	0.00	0.00		
EP-921 (Paint gun clean-up solvent)														
Tripropylene glycol methylene ether	25498481	100.00%	--	8.17	1.39	0.00	0.0625	30	0.1226	0.5106	--	--		
Propylene Carbonate	108327	100.00%	--	--	--	--	--	--	0.1228	0.5106	--	--		
<i>o</i> -Limonene	5989275	0.30%	--	--	--	--	--	--	0.0004	0.0015	--	--		

Notes:

1. Percent content is considered as the maximum value of the range provided in the MSDS.
2. "HAPs" stands for Hazardous Air Pollutant.
3. Product Density & Volatile Organic Compound (VOC) (less water and federally exempt solvents) content are obtained from the MSDS.
4. No solids content expected.
5. The coating usage rate in gallons/hr and gallons/year is estimated.
6. The VOC emissions are calculated based on an assumed usage rates.
7. The Particulate Matter (PM) emissions are calculated based on an assumed usage rates.

Site Permit Determination Application
S.P.M. Flow Control, Inc. ■ Buckhannon, West Virginia
February 25, 2015 ■ Terracon Project No. 94137584



APPENDIX F – PERMIT DETERMINATION FORM



WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
601 57th Street, SE
Charleston, WV 25304
Phone: (304) 926-0475
www.dep.wv.gov/daq

**PERMIT DETERMINATION FORM
(PDF)**

FOR AGENCY USE ONLY: PLANT I.D. # _____
PDF # _____ PERMIT WRITER _____

1. NAME OF APPLICANT (AS REGISTERED WITH THE WV SECRETARY OF STATE'S OFFICE):
S.P.M. Flow Control, Inc.

2. NAME OF FACILITY (IF DIFFERENT FROM ABOVE):
S.P.M. Flow Control, Inc. - BUCKHANNON

3. NORTH AMERICAN INDUSTRY
CLASSIFICATION SYSTEM (NAICS)
CODE:
8 1 1 3 1 0

4A. MAILING ADDRESS:
52 NORWINS DRIVE
BUCKHANNON, WEST VIRGINIA 262201

4B. PHYSICAL ADDRESS:
52 NORWINS DRIVE
BUCKHANNON, WEST VIRGINIA 262201

5A. DIRECTIONS TO FACILITY (PLEASE PROVIDE MAP AS ATTACHMENT A):
From Buckhannon, WV head north on WV-20 for 0.6 miles, merge onto US-119 S/US-33 W and head west for about 3.2 miles, then turn left on Fink Run Road and travel 0.2 miles to the destination.

5B. NEAREST ROAD:
US-119S

5C. NEAREST CITY OR TOWN:
BUCKHANNON

5D. COUNTY:
UPSHUR

5E. UTM NORTHING (KM):
4317.57546 m

5F. UTM EASTING (KM):
561.68433 m

5G. UTM ZONE:
17 S

6A. INDIVIDUAL TO CONTACT IF MORE INFORMATION IS REQUIRED:
MIKE DICKERSON

6B. TITLE:
ENVIRONMENTAL AND SUSTAINABILITY
ENGINEER

6C. TELEPHONE:
817-248-2611

6D. FAX:
--

6E. E-MAIL:
mike.dickerson@weirspm.com

7A. DAQ PLANT I.D. NO. (FOR AN EXISTING FACILITY ONLY):
NA

7B. PLEASE LIST ALL CURRENT 45CSR13, 45CSR14, 45CSR19
AND/OR TITLE V (45CSR30) PERMIT NUMBERS ASSOCIATED
WITH THIS PROCESS (FOR AN EXISTING FACILITY ONLY):
NA

7C. IS THIS PDF BEING SUBMITTED AS THE RESULT OF AN ENFORCEMENT ACTION? IF YES, PLEASE LIST: NO

8A. TYPE OF EMISSION SOURCE (CHECK ONE):
 NEW SOURCE ADMINISTRATIVE UPDATE
 MODIFICATION OTHER (PLEASE EXPLAIN IN 11B)

8B. IF ADMINISTRATIVE UPDATE, DOES DAQ HAVE THE
APPLICANT'S CONSENT TO UPDATE THE EXISTING
PERMIT WITH THE INFORMATION CONTAINED HEREIN?
NA YES NO

9. IS DEMOLITION OR PHYSICAL RENOVATION AT AN EXISTING FACILITY INVOLVED? YES NO

10A. DATE OF ANTICIPATED INSTALLATION OR CHANGE:
07 / 02 /2014.

10B. DATE OF ANTICIPATED START-UP:
07 / 02 /2014.

11A. PLEASE PROVIDE A DETAILED PROCESS FLOW DIAGRAM SHOWING EACH PROPOSED OR MODIFIED PROCESS EMISSION POINT AS ATTACHMENT B.

11B. PLEASE PROVIDE A DETAILED PROCESS DESCRIPTION AS ATTACHMENT C.

12. PLEASE PROVIDE MATERIAL SAFETY DATA SHEETS (MSDS) FOR ALL MATERIALS PROCESSED, USED OR PRODUCED AS ATTACHMENT D. FOR CHEMICAL PROCESSES, PLEASE PROVIDE A MSDS FOR EACH COMPOUND EMITTED TO AIR.

13A. REGULATED AIR POLLUTANT EMISSIONS:

⇒ FOR A NEW FACILITY, PLEASE PROVIDE PLANT WIDE EMISSIONS BASED ON THE POTENTIAL TO EMIT (PTE) FOR THE FOLLOWING AIR POLLUTANTS INCLUDING ALL PROCESSES.

⇒ FOR AN EXISTING FACILITY, PLEASE PROVIDE THE PROPOSED CHANGE IN EMISSIONS BASED ON THE PTE OF ALL PROCESS CHANGES FOR THE FOLLOWING AIR POLLUTANTS.

PTE FOR A GIVEN POLLUTANT IS TYPICALLY BEFORE AIR POLLUTION CONTROL DEVICES AND IS COLLECTED BASED ON THE MAXIMUM DESIGN CAPACITY OF PROCESS EQUIPMENT.

POLLUTANT	HOURLY PTE (LB/HR)	YEARLY PTE (TON/YR) (HOURLY PTE MULTIPLIED BY 8760 HR/YR) DIVIDED BY 2000 LB/TON
PM	1.8655	3.4045 (65% transfer eff)
PM ₁₀	1.8655	3.4045 (65% transfer eff)
VOCs	5.2484	9.5783 (See Attachment E)
CO	NA	NA
NO _x	NA	NA
SO ₂	NA	NA
Pb	NA	NA
HAPs (AGGREGATE AMOUNT)	3.9650	7.2361 (See Attachment E)
TAPs (INDIVIDUALLY)*	NA	NA
OTHER (INDIVIDUALLY)*	SEE ATTACHMENT E	SEE ATTACHMENT E

* ATTACH ADDITIONAL PAGES AS NEEDED

13B. PLEASE PROVIDE ALL SUPPORTING CALCULATIONS AS ATTACHMENT E.

CALCULATE AN HOURLY AND YEARLY PTE OF EACH PROCESS EMISSION POINT (SHOWN IN YOUR DETAILED PROCESS FLOW DIAGRAM) FOR ALL AIR POLLUTANTS LISTED ABOVE INCLUDING INDIVIDUAL HAP'S (LISTED IN SECTION 112[b] OF THE 1990 CAAA), TAP'S (LISTED IN 45CSR27), AND OTHER AIR POLLUTANTS (E.G. POLLUTANTS LISTED IN TABLE 45-13A OF 45CSR13, MINERAL ACIDS PER 45CSR7, ETC.).

14. CERTIFICATION OF DATA

I, BILL MARSHALL (TYPE NAME) ATTEST THAT ALL THE REPRESENTATIONS CONTAINED IN THIS APPLICATION, OR APPENDED HERETO, ARE TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE BASED ON INFORMATION AND BELIEF AFTER REASONABLE INQUIRY, AND THAT I AM A **RESPONSIBLE OFFICIAL*** (PRESIDENT, VICE PRESIDENT, SECRETARY OR TREASURER, GENERAL PARTNER OR SOLE PROPRIETOR) OF THE APPLICANT.

SIGNATURE OF RESPONSIBLE OFFICIAL: 

TITLE: VP and GM US Service Centers

DATE: 03 / 04 / 2015

** THE DEFINITION OF THE PHRASE 'RESPONSIBLE OFFICIAL' CAN BE FOUND AT 45CSR13, SECTION 2.23.

NOTE: PLEASE CHECK ENCLOSED ATTACHMENTS

ATTACHMENT A ATTACHMENT B ATTACHMENT C ATTACHMENT D ATTACHMENT E

RECORDS ON ALL CHANGES ARE REQUIRED TO BE KEPT AND MAINTAINED ON-SITE FOR TWO (2) YEARS.

THE PERMIT DETERMINATION FORM WITH THE INSTRUCTIONS CAN BE FOUND ON DAO'S PERMITTING SECTION WEB SITE

www.dep.wv.gov/daq

Site Permit Determination Application
S.P.M. Flow Control, Inc. ■ Buckhannon, West Virginia
February 25, 2015 ■ Terracon Project No. 94137584



APPENDIX G – EQUIPMENT INFORMATION

Inland Technology Incorporated

Pollution Prevention By Design

IT-200™ PAINT GUN CLEANER / RECLAMATION SYSTEM

The **IT-200™** is designed to use and reclaim Inland Technology's environmentally responsible cleaning solvents **EP-921™**, **EP-1088™**, and **DRY SOL™**. These solvents are high flash point non-HAP, low VOC replacements for MEK and Lacquer thinner.

The **IT-200™** automatically cleans cup guns and is complete with a flow-thru brush for hand detailing. The **IT-200™** also has integral hose cleaning attachments for cleaning small pots and lines.

The **IT-200™** makes use of the on board **EDGE TEK™* Micro Filtration** that filters down to .1 micron nominal. This system allows for extended reuse of the cleaning solution.

FEATURES:

- Flow-thru hose and brush
- Automatic Lid Closure when not in use
- Hose cleaning cycle
- Automatic cleaning cycle
- Hand cleaning cycle
- .1 Micron Nominal Filtration ensures extended use of cleaning solution lowers operating costs, and reduces waste

CONSTRUCTION: Stainless Steel

OPERATION: Air Operated Double Diaphragm Pump

OVERALL DIMENSIONS: 38" L X 22" W X 42" H



401 East 27th Street, Tacoma, WA 98421
(253) 383-1177 • (800) 552-3100
inland@inlandtech.com

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* **EDGE TEK™ Filtration Patent Pending**
P070710

Inland Technology Incorporated

Pollution Prevention By Design

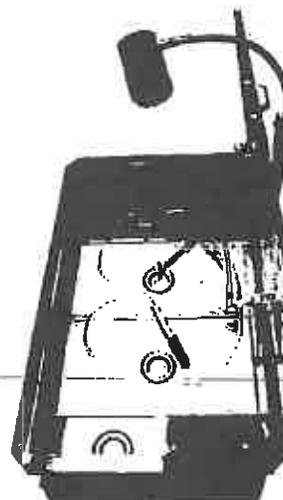
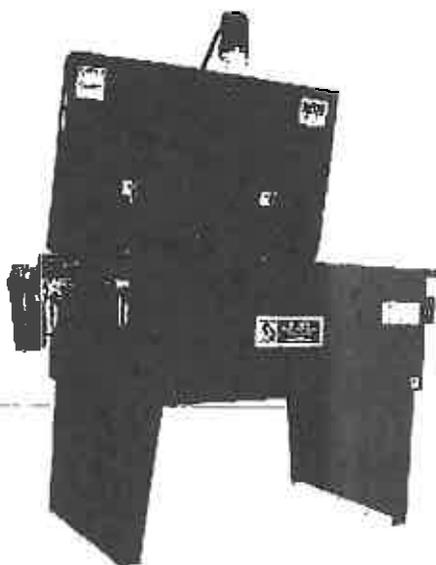
IT-48WC™

PARTSWASHER / WEAPONS CLEANING SYSTEM

The Inland Technology IT-48WC™ Partswasher / Weapons Cleaning System is designed for high-volume usage. It has a Dual System Design, which allows a number of individuals to clean weapons or parts simultaneously.

The IT-48WC™ is equipped with the Inland Technology EDGE TEK™ Micro Filtration System, which filters down to 0.1 micron nominal. When properly managed and used with Inland's BREAKTHROUGH®, SKYSOL®, or SKYSOL® 100 solvents, this system will generally extend the solvent life for several years.

In test cleaning of numerous weapons systems, the cleaning time was drastically reduced by hours in most cases. The average cleaning time, depending upon the weapon, ranged from 8 to 20 minutes. The weapons were then wiped down, lubricated, and assembled - most passing inspection without further cleaning.



Specifications

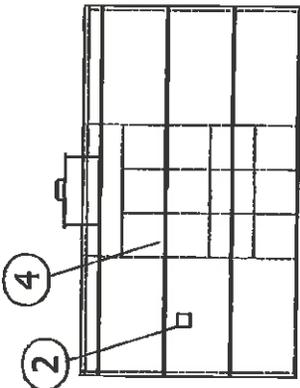
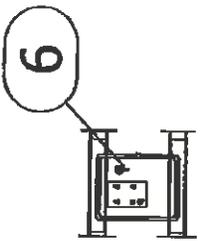
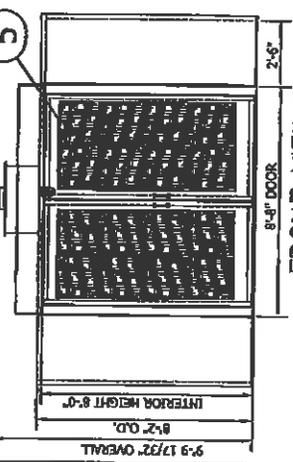
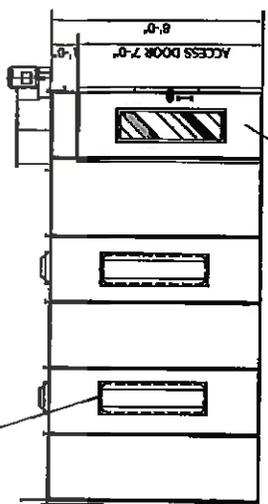
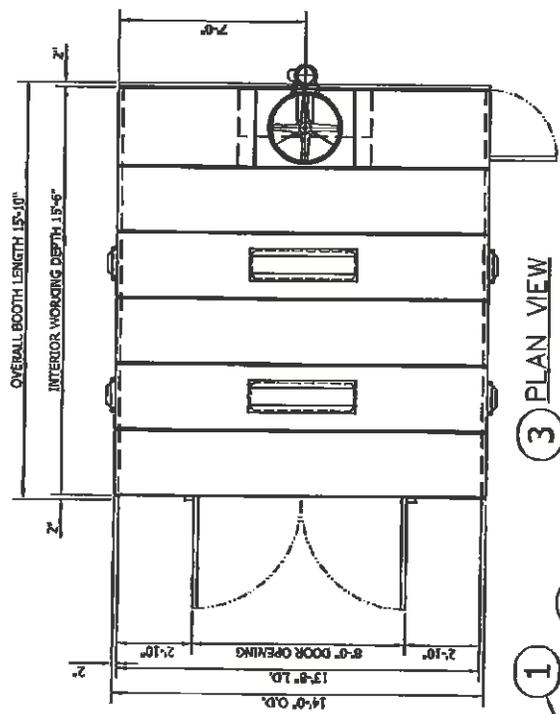
Overall dimensions:	53"l x 33"w x 69"h	Flex nozzle:	18" long
Inside tub dimensions:	48"l x 28"w x 18"h	Dual flow through brushes:	53" long
Pump system:	500 GPH pump	Tub thickness:	13 gauge steel
Drain baskets:	3-1/4" diameter	Solvent capacity:	42 gallons
Parts & Drain baskets:	Stainless Steel	2 Parts baskets:	3-1/4" diameter

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inland@inlandtech.com
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* EDGE TEK™ Filtration Patent Pending
A110610

Electrical Requirements:
 1. All electrical work shall be in accordance with the National Electrical Code (NEC) and all applicable local codes.
 2. The contractor shall provide all electrical materials and labor for the installation of the exhaust system.
 3. The contractor shall provide all electrical materials and labor for the installation of the exhaust system.
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 19. The contractor shall provide all electrical materials and labor for the installation of the exhaust system.
 20. The contractor shall provide all electrical materials and labor for the installation of the exhaust system.

ITEM	QTY.	PART #	DESCRIPTION
1	ONE	30530625	30" DIA. TUBULAR FAN RATED FOR 10,700 SQM EXHAUST @ 1/2" STATIC, ODP TYPE MOTOR 3 HP.
2	ONE		MANOMETER FOR EXHAUST CHAMBER.
3	6	# 229	LIGHT FIXTURES, FOUR TUBE 48" 32 WATT FIXTURES MOUNTED BEHIND CLEAR TEMPERED GLASS, UL RATED, (OPEN TYPE)
4	20		EXHAUST FILTERS (20"x20"x2" SUPPLIED WITH FILTER GRIDS)
5	1		PRODUCT FILTERED DOOR WITH INTAKE FILTERS, DOOR LATCH, HANDLES AND DOOR SWEEP.
6	1	CP-230-3P-3A1P	CONTROL PANEL (TO BE MOUNTED TO COMPACT WITH LOCAL CODES AND AT LEAST 36" FROM ANY OPENING)
7			DUCT PACKAGE
8	1	AO-3004-W	(5) 30" PLAIN PIPE (NOT SHOWN) (1) 30" AUTOMATIC ROOF VENTILATOR (NOT SHOWN) PERSONNEL ACCESS DOOR, 30" x 69" w/ OBSERVATION WINDOW, LATCH & HANDLE



ADDITIONAL DUCTWORK SUPPORT TO SUIT FIELD CONDITIONS TO BE SUPPLIED BY OTHERS. ALL ANCHOR BOLTS TO BE SUPPLIED BY OTHERS.

CON-NET SPRAY BOOTHS ARE MANUFACTURED IN ACCORDANCE WITH NFPA-33 BOOTH WALLS & CEILING PANELS FABRICATED OF 18 GA. GALVANIZED STEEL IN ACCORDANCE WITH NFPA-33 CHAPTER 5.1.4. SEE ORDER ACKNOWLEDGMENT FOR COMPLETE LIST OF PROVIDED STACK, AND OPTIONAL COMPONENTS.

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL MECHANICAL CODE (IMC) AND THE 2015 INTERNATIONAL ELECTRICAL CODE (IEC).
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL MECHANICAL CODE (IMC) AND THE 2015 INTERNATIONAL ELECTRICAL CODE (IEC).
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6. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL MECHANICAL CODE (IMC) AND THE 2015 INTERNATIONAL ELECTRICAL CODE (IEC).

For information on installation of the booth and components, please see our web site at www.colmet.com or call us at 800-451-1234. See also our literature on the left side of this page, and then click on "Install Manual".

COLMET
 COLMET SPRAY BOOTHS
 10000 W. LOOP WEST
 HOUSTON, TEXAS 77036
 TEL: 281-271-1234
 WWW.COLMET.COM

44179 VP-14-08-15-58

UNIT: LMC
 USER: GJM
 PROJECT: CC
 DATE: 01/15/13
 DRAWN: J. G. J.

END VIEW

SIDE VIEW

FRONT VIEW

NO DOORS INSTALLED

FIBERBOND

The Best Filters Begin
With The Best Media

E. P. Green Media

E. P. Green Dual-Density Polyester Collection Media

E. P. Green is designed for general purpose coating applications. Its white layer of media provides superior holding capacity, while the dense green layer traps even the finest particles. Unsurpassed strength and durability - will not collapse or tear when fully-loaded.

99.74% Removal Efficiency

E. P. Green Collection Media Bulk Rolls & Pads

Performance & Environmental Protection

E. P. Green's dual-density design makes it the ideal collection media choice for general purpose coating applications. E. P. Green is halogen-free.

E. P. Green Bulk Rolls

Easily cut to any length for use as collection blankets.

Standard rolls are available in 20", 25", 45", 50", 60", 72" and 84" widths by 90' length.

Standard size rolls can also be *perforated-to-length* (minimum per foot 20").



E. P. Green Bulk Rolls



E. P. Green Cut Pads

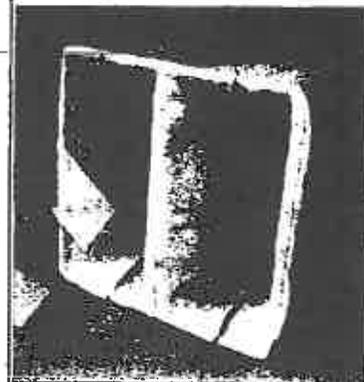


Two Unique
Layers



E. P. Green
Dual-Density Design

Two-Pocket E. P. Green Bag



Holds Four-Times More Overspray Than A Single Pad

E. P. Green Bags offer increased paint holding and extended service life. Bags can be used as a primary filter, or as part of a 2-stage or 3-stage system. The standard, self-sealing model has a double pocket design, making it ideal for use in most spray work. Easy removal and service.

FIBERBOND

110 Menke Road, Michigan City, IN 46360 • Phone (219) 879-4541 • Fax (219) 874-7502
Email: customer.service@fiberbond.net • www.fiberbond.net

FIBERBOND

The Best Filters Begin
With The Best Media

E. P. Green Media

Independent Paint Arrestance Test Report Based On 40 CFR Part 63 National Emission Standard.

PAINT ARRESTANCE FILTER TEST REPORT	
Spray Removal Efficiency & Paint Holding Capacity	
BASED ON 40 CFR PART 63 NATIONAL EMISSION STANDARD	
Tested for	FiberBond
Filter Model	FiberBond
Filter Name/Model	E.P. Green Media
Report# / Test#	R 106 T 206
Report Date	15-Nov-11

Test Information

FILTER DESCRIPTION (20" x 20" pad)
White (or Green) high-eff. poly. P.A.

PAINT DESCRIPTION
High Solids (Highly) named (S.W. Perma-kat 2000, etc)

PAINT SPRAY METHOD
Conventional Air Gun at 101 PSI

SPRAY FEED RATE
142 gr/min 138 cc/min

AIR VELOCITY
180 FPM

Test Results

INITIAL PRESSURE DROP of Clean Test Filter
0.04 in water

FINAL PRESSURE DROP of Loaded Test Filter
0.60 in water

WEIGHT GAIN on TEST FILTER & Test Frame Trough
1478 grams

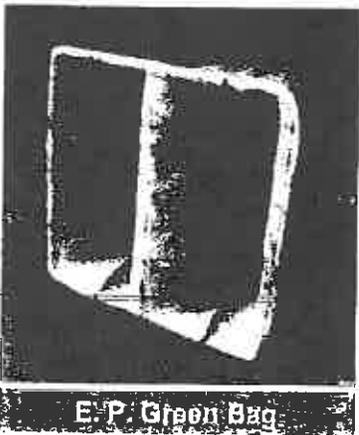
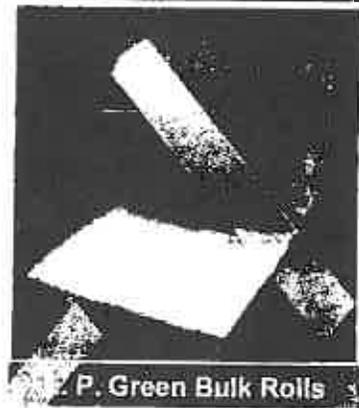
PAINT HOLDING CAPACITY of TEST FILTER
1424 grams 3.1 lb.

PAINT RUN OFF
65 grams

WEIGHT GAIN FINAL FILTER
3.6 grams PENETRATION

AVERAGE REMOVAL EFFICIENCY of TEST FILTER
99.74 %

Test Engineer: Jose Hernandez
Supervising Engineer: K. C. Kwock, Ph.D.



E. P. Green test report is available on the
Fiber Bond finishing products catalog CD or by
contacting the marketing department at (219) 879-4544.

FIBERBOND

110 Menke Road, Michigan City, IN 46360 • Phone (219) 879-4541 • Fax (219) 874-7502
Email: customer.service@fiberbond.net • www.fiberbond.net • January 2013