



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

**APPLICATION FOR NSR PERMIT**  
**AND**  
**TITLE V PERMIT REVISION**  
**(OPTIONAL)**

PLEASE CHECK ALL THAT APPLY TO NSR (45CSR13) (IF KNOWN):

- CONSTRUCTION     MODIFICATION     RELOCATION  
 CLASS I ADMINISTRATIVE UPDATE     TEMPORARY  
 CLASS II ADMINISTRATIVE UPDATE     AFTER-THE-FACT

PLEASE CHECK TYPE OF 45CSR30 (TITLE V) REVISION (IF ANY):

- ADMINISTRATIVE AMENDMENT     MINOR MODIFICATION  
 SIGNIFICANT MODIFICATION

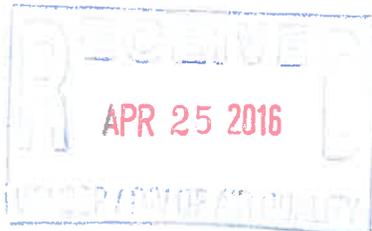
IF ANY BOX ABOVE IS CHECKED, INCLUDE TITLE V REVISION INFORMATION AS ATTACHMENT S TO THIS APPLICATION

*FOR TITLE V FACILITIES ONLY: Please refer to "Title V Revision Guidance" in order to determine your Title V Revision options (Appendix A, "Title V Permit Revision Flowchart") and ability to operate with the changes requested in this Permit Application.*

**Section I. General**

1. Name of applicant (as registered with the WV Secretary of State's Office): <b>MAGNETECH INDUSTRIAL SERVICES</b>		2. Federal Employer ID No. (FEIN): <b>34-2114582</b>	
3. Name of facility (if different from above): <b>SAME</b>		4. The applicant is the: <input type="checkbox"/> OWNER <input checked="" type="checkbox"/> OPERATOR <input type="checkbox"/> BOTH	
5A. Applicant's mailing address: <b>501 - 8TH AVENUE WEST HUNTINGTON, WV 25701</b>		5B. Facility's present physical address: <b>501 - 8TH AVENUE WEST HUNTINGTON, WV 25701</b>	
6. <b>West Virginia Business Registration.</b> Is the applicant a resident of the State of West Virginia? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO ⇒ If YES, provide a copy of the <b>Certificate of Incorporation/Organization/Limited Partnership</b> (one page) including any name change amendments or other Business Registration Certificate as <b>Attachment A</b> . ⇒ If NO, provide a copy of the <b>Certificate of Authority/Authority of L.L.C./Registration</b> (one page) including any name change amendments or other Business Certificate as <b>Attachment A</b> .			
7. If applicant is a subsidiary corporation, please provide the name of parent corporation:			
8. Does the applicant own, lease, have an option to buy or otherwise have control of the <i>proposed site</i> ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO ⇒ If YES, please explain: <b>PROPERTY IS LEASE FROM THE HUNTINGTON AREA DEVELOPMENT COUNCIL</b> ⇒ If NO, you are not eligible for a permit for this source.			
9. Type of plant or facility (stationary source) to be <b>constructed, modified, relocated, administratively updated</b> or <b>temporarily permitted</b> (e.g., coal preparation plant, primary crusher, etc.): <b>ELECTRIC MOTOR REPAIR SHOP</b>		10. North American Industry Classification System (NAICS) code for the facility: <b>811310</b>	
11A. DAQ Plant ID No. (for existing facilities only): <b>011 - 00333</b>		11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only): <b>R13-1442B</b>	

*All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.*



<p>12A.</p> <p>⇒ For <b>Modifications, Administrative Updates</b> or <b>Temporary permits</b> at an existing facility, please provide directions to the <i>present location</i> of the facility from the nearest state road;</p> <p>⇒ For <b>Construction</b> or <b>Relocation permits</b>, please provide directions to the <i>proposed new site location</i> from the nearest state road. Include a <b>MAP</b> as <b>Attachment B</b>.</p> <p>HUNTINGTON, WV:</p> <p>At the intersection of Rt. 60 West (5th Ave &amp; 1st St) turn right (south) onto 1st Street. Continue 3 city blocks to the intersection of 1st Street and 8th Avenue. Turn right (West) onto 8th Avenue. Continue 5 city blocks to the intersection of 5th Street West and 8th Avenue. Site is located on the southwest corner of the intersection.</p>		
12.B. New site address (if applicable):	12C. Nearest city or town: HUNTINGTON, WV	12D. County: CABELL
12.E. UTM Northing (KM): 4252.347	12F. UTM Easting (KM): 372.357	12G. UTM Zone: 17
<p>13. Briefly describe the proposed change(s) at the facility: Increasing the VPI (8E), dip tank (9E), and Solvent VOC's. Adding new dip tank resin, Increasing the HAPS for spray paint booth (6E).</p>		
<p>14A. Provide the date of anticipated installation or change: / /</p> <p>⇒ If this is an <b>After-The-Fact</b> permit application, provide the date upon which the proposed change did happen: / / N/A</p>		<p>14B. Date of anticipated Start-Up if a permit is granted: / / N/A</p>
<p>14C. Provide a <b>Schedule</b> of the planned <b>Installation of/Change</b> to and <b>Start-Up</b> of each of the units proposed in this permit application as <b>Attachment C</b> (if more than one unit is involved). N/A</p>		
<p>15. Provide maximum projected <b>Operating Schedule</b> of activity/activities outlined in this application: 24 Hours Per Day      7 Days Per Week      52 Weeks Per Year</p>		
<p>16. Is demolition or physical renovation at an existing facility involved?    <input type="checkbox"/> YES    <input checked="" type="checkbox"/> NO</p>		
<p>17. <b>Risk Management Plans.</b> If this facility is subject to 112(r) of the 1990 CAAA, or will become subject due to proposed changes (for applicability help see <a href="http://www.epa.gov/ceppo">www.epa.gov/ceppo</a>), submit your <b>Risk Management Plan (RMP)</b> to U. S. EPA Region III.</p>		
<p>18. <b>Regulatory Discussion.</b> List all Federal and State air pollution control regulations that you believe are applicable to the proposed process (<i>if known</i>). A list of possible applicable requirements is also included in Attachment S of this application (Title V Permit Revision Information). Discuss applicability and proposed demonstration(s) of compliance (<i>if known</i>). Provide this information as <b>Attachment D</b>. N/A</p>		
<p><b>Section II. Additional attachments and supporting documents.</b></p>		
<p>19. Include a check payable to WVDEP – Division of Air Quality with the appropriate <b>application fee</b> (per 45CSR22 and 45CSR13). See attached SBAP waiver.</p>		
<p>20. Include a <b>Table of Contents</b> as the first page of your application package.</p>		
<p>21. Provide a <b>Plot Plan</b>, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is or is to be located as <b>Attachment E</b> (Refer to <b>Plot Plan Guidance</b>).</p> <p>⇒ Indicate the location of the nearest occupied structure (e.g. church, school, business, residence).</p>		
<p>22. Provide a <b>Detailed Process Flow Diagram(s)</b> showing each proposed or modified emissions unit, emission point and control device as <b>Attachment F</b>.</p>		
<p>23. Provide a <b>Process Description</b> as <b>Attachment G</b>.</p> <p>⇒ Also describe and quantify to the extent possible all changes made to the facility since the last permit review (if applicable).</p>		
<p><i>All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.</i></p>		

24. Provide **Material Safety Data Sheets (MSDS)** for all materials processed, used or produced as **Attachment H**.  
 ⇨ For chemical processes, provide a MSDS for each compound emitted to the air.

25. Fill out the **Emission Units Table** and provide it as **Attachment I**.

26. Fill out the **Emission Points Data Summary Sheet (Table 1 and Table 2)** and provide it as **Attachment J**.

27. Fill out the **Fugitive Emissions Data Summary Sheet** and provide it as **Attachment K**.

28. Check all applicable **Emissions Unit Data Sheets** listed below:

<input type="checkbox"/> Bulk Liquid Transfer Operations	<input type="checkbox"/> Haul Road Emissions	<input type="checkbox"/> Quarry
<input type="checkbox"/> Chemical Processes	<input type="checkbox"/> Hot Mix Asphalt Plant	<input type="checkbox"/> Solid Materials Sizing, Handling and Storage Facilities
<input type="checkbox"/> Concrete Batch Plant	<input type="checkbox"/> Incinerator	<input type="checkbox"/> Storage Tanks
<input type="checkbox"/> Grey Iron and Steel Foundry	<input type="checkbox"/> Indirect Heat Exchanger	

General Emission Unit, specify

Fill out and provide the **Emissions Unit Data Sheet(s)** as **Attachment L**.

29. Check all applicable **Air Pollution Control Device Sheets** listed below: N/A

<input type="checkbox"/> Absorption Systems	<input type="checkbox"/> Baghouse	<input type="checkbox"/> Flare
<input type="checkbox"/> Adsorption Systems	<input type="checkbox"/> Condenser	<input type="checkbox"/> Mechanical Collector
<input type="checkbox"/> Afterburner	<input type="checkbox"/> Electrostatic Precipitator	<input type="checkbox"/> Wet Collecting System

Other Collectors, specify Paint Booth Filters and Abrasive Blast Cabinet Filters.

Fill out and provide the **Air Pollution Control Device Sheet(s)** as **Attachment M**.

30. Provide all **Supporting Emissions Calculations** as **Attachment N**, or attach the calculations directly to the forms listed in Items 28 through 31.

31. **Monitoring, Recordkeeping, Reporting and Testing Plans.** Attach proposed monitoring, recordkeeping, reporting and testing plans in order to demonstrate compliance with the proposed emissions limits and operating parameters in this permit application. Provide this information as **Attachment O**. N/A

➤ Please be aware that all permits must be practically enforceable whether or not the applicant chooses to propose such measures. Additionally, the DAQ may not be able to accept all measures proposed by the applicant. If none of these plans are proposed by the applicant, DAQ will develop such plans and include them in the permit.

32. **Public Notice.** At the time that the application is submitted, place a **Class I Legal Advertisement** in a newspaper of general circulation in the area where the source is or will be located (See 45CSR§13-8.3 through 45CSR§13-8.5 and **Example Legal Advertisement** for details). Please submit the **Affidavit of Publication** as **Attachment P** immediately upon receipt.

33. **Business Confidentiality Claims.** Does this application include confidential information (per 45CSR31)?

YES     NO

➤ If **YES**, identify each segment of information on each page that is submitted as confidential and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "**Precautionary Notice – Claims of Confidentiality**" guidance found in the **General Instructions** as **Attachment Q**.

**Section III. Certification of Information**

34. **Authority/Delegation of Authority.** Only required when someone other than the responsible official signs the application. Check applicable **Authority Form** below:

<input checked="" type="checkbox"/> Authority of Corporation or Other Business Entity	<input type="checkbox"/> Authority of Partnership
<input type="checkbox"/> Authority of Governmental Agency	<input type="checkbox"/> Authority of Limited Partnership

Submit completed and signed **Authority Form** as **Attachment R**.

*All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.*

35A. **Certification of Information.** To certify this permit application, a Responsible Official (per 45CSR§13-2.22 and 45CSR§30-2.28) or Authorized Representative shall check the appropriate box and sign below.

**Certification of Truth, Accuracy, and Completeness**

I, the undersigned  **Responsible Official** /  **Authorized Representative**, hereby certify that all information contained in this application and any supporting documents appended hereto, is true, accurate, and complete based on information and belief after reasonable inquiry I further agree to assume responsibility for the construction, modification and/or relocation and operation of the stationary source described herein in accordance with this application and any amendments thereto, as well as the Department of Environmental Protection, Division of Air Quality permit issued in accordance with this application, along with all applicable rules and regulations of the West Virginia Division of Air Quality and W.Va. Code § 22-5-1 et seq. (State Air Pollution Control Act). If the business or agency changes its Responsible Official or Authorized Representative, the Director of the Division of Air Quality will be notified in writing within 30 days of the official change.

**Compliance Certification**

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

SIGNATURE   
(Please use blue ink)

APR 25 2016

DATE: 3-29-16  
(Please use blue ink)

35B. Printed name of signee:

Mike Rice

35C. Title:

President

35D. E-mail:

mrice@magnotech.com

36E. Phone:

330-650-4310

36F. FAX:

830-3522  
330-650-3522

36A. Printed name of contact person (if different from above):

Steven Lolli

36B. Title:

Director HSE

36C. E-mail:

slolli@magnotech.com

36D. Phone:

216-650-4310

36E. FAX:

330-830-3522

**PLEASE CHECK ALL APPLICABLE ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:**

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Attachment A: Business Certificate               | <input type="checkbox"/> Attachment K: Fugitive Emissions Data Summary Sheet            |
| <input checked="" type="checkbox"/> Attachment B: Map(s)                             | <input checked="" type="checkbox"/> Attachment L: Emissions Unit Data Sheet(s)          |
| <input type="checkbox"/> Attachment C: Installation and Start Up Schedule            | <input checked="" type="checkbox"/> Attachment M: Air Pollution Control Device Sheet(s) |
| <input type="checkbox"/> Attachment D: Regulatory Discussion                         | <input checked="" type="checkbox"/> Attachment N: Supporting Emissions Calculations     |
| <input checked="" type="checkbox"/> Attachment E: Plot Plan                          | <input type="checkbox"/> Attachment O: Monitoring/Recordkeeping/Reporting/Testing Plans |
| <input checked="" type="checkbox"/> Attachment F: Detailed Process Flow Diagram(s)   | <input checked="" type="checkbox"/> Attachment P: Public Notice                         |
| <input checked="" type="checkbox"/> Attachment G: Process Description                | <input type="checkbox"/> Attachment Q: Business Confidential Claims                     |
| <input checked="" type="checkbox"/> Attachment H: Material Safety Data Sheets (MSDS) | <input checked="" type="checkbox"/> Attachment R: Authority Forms                       |
| <input checked="" type="checkbox"/> Attachment I: Emission Units Table               | <input type="checkbox"/> Attachment S: Title V Permit Revision Information              |
| <input checked="" type="checkbox"/> Attachment J: Emission Points Data Summary Sheet | <input type="checkbox"/> Application Fee  |

Please mail an original and three (3) copies of the complete permit application with the signature(s) to the DAQ, Permitting Section, at the address listed on the first page of this application. Please DO NOT fax permit applications.

**FOR AGENCY USE ONLY - IF THIS IS A TITLE V SOURCE:**

- Forward 1 copy of the application to the Title V Permitting Group and:
- For Title V Administrative Amendments:
  - NSR permit writer should notify Title V permit writer of draft permit,
- For Title V Minor Modifications:
  - Title V permit writer should send appropriate notification to EPA and affected states within 5 days of receipt,
  - NSR permit writer should notify Title V permit writer of draft permit.
- For Title V Significant Modifications processed in parallel with NSR Permit revision:
  - NSR permit writer should notify a Title V permit writer of draft permit,
  - Public notice should reference both 45CSR13 and Title V permits,
  - EPA has 45 day review period of a draft permit.

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

**APPLICATION FOR NSR PERMIT – CLASS II ADMINISTRATIVE UPDATE ATTACHMENTS**

<b><u>ATTACHED ITEM</u></b>	<b><u>PAGE NO.</u></b>
ATTACHMENT A: WV BUSINESS REGISTRATION	1
ATTACHMENT B: MAP	2-4
ATTACHMENT E: PLOT PLAN	5
ATTACHMENT F: DETAILED PROCESS FLOW DIAGRAM	6
ATTACHMENT G: PROCESS DESCRIPTION	7-10
ATTACHMENT H: MATERIAL SAFETY DATA SHEETS	
H-1: SLATE GRAY – Sherwin Williams	11-15
H-2: SAFETY YELLOW – Sherwin Williams	16-19
H-3: ANSI YELLOW – Columbia	20-23
H-4: MACHINERY GRAY - Columbia	24-28
H-5: XYLENE	29-32
H-6: VACUUM PRESSURE IMPREGNATION VARNISH	33-44
H-7: DIP AND BAKE VARNISH	45-48
H-8: SYNTHITE VARNISH	49-55
ATTACHMENT I: EMISSION UNITS TABLE	56
ATTACHMENT J: EMISSION POINTS DATA SUMMARY SHEET; TABLE 1 and TABLE 2	57-58
ATTACHMENT L: EMISSION UNITS DATA SHEET	59-69
ATTACHMENT M: AIR POLLUTION CONTROL DEVICE(S)	70-72
ATTACHMENT N: SUPPORTING EMISSIONS CALCULATIONS	73-76
ATTACHMENT P: CLASS I LEGAL ADVERTISEMENT (draft copy – a notarized copy will follow)	77
ATTACHMENT R: AUTHORITY FORM	78
APPLICATION FEE	

**WEST VIRGINIA  
STATE TAX DEPARTMENT  
BUSINESS REGISTRATION  
CERTIFICATE**

ISSUED TO:  
**MAGNETECH INDUSTRIAL SERVICES INC**  
**501 8TH AVE W**  
**HUNTINGTON, WV 25701-2543**

**BUSINESS REGISTRATION ACCOUNT NUMBER: 1028-1081**

This certificate is issued on: 12/24/2013

*This certificate is issued by  
the West Virginia State Tax Commissioner  
in accordance with Chapter 11, Article 12 of the West Virginia Code.*

*The person or organization identified on this certificate is registered  
to conduct business in the State of West Virginia at the location above.*

This certificate is not transferrable and must be displayed at the location for which issued.  
This certificate shall be permanent until cessation of the business for which the certificate of registration  
was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new  
certificate shall be required.

**TRAVELING/STREET VENDORS:** Must carry a copy of this certificate in every vehicle operated by them.  
**CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS:** Must have a copy of  
this certificate displayed at every job site within West Virginia.

atL006 v.4  
L1019675712

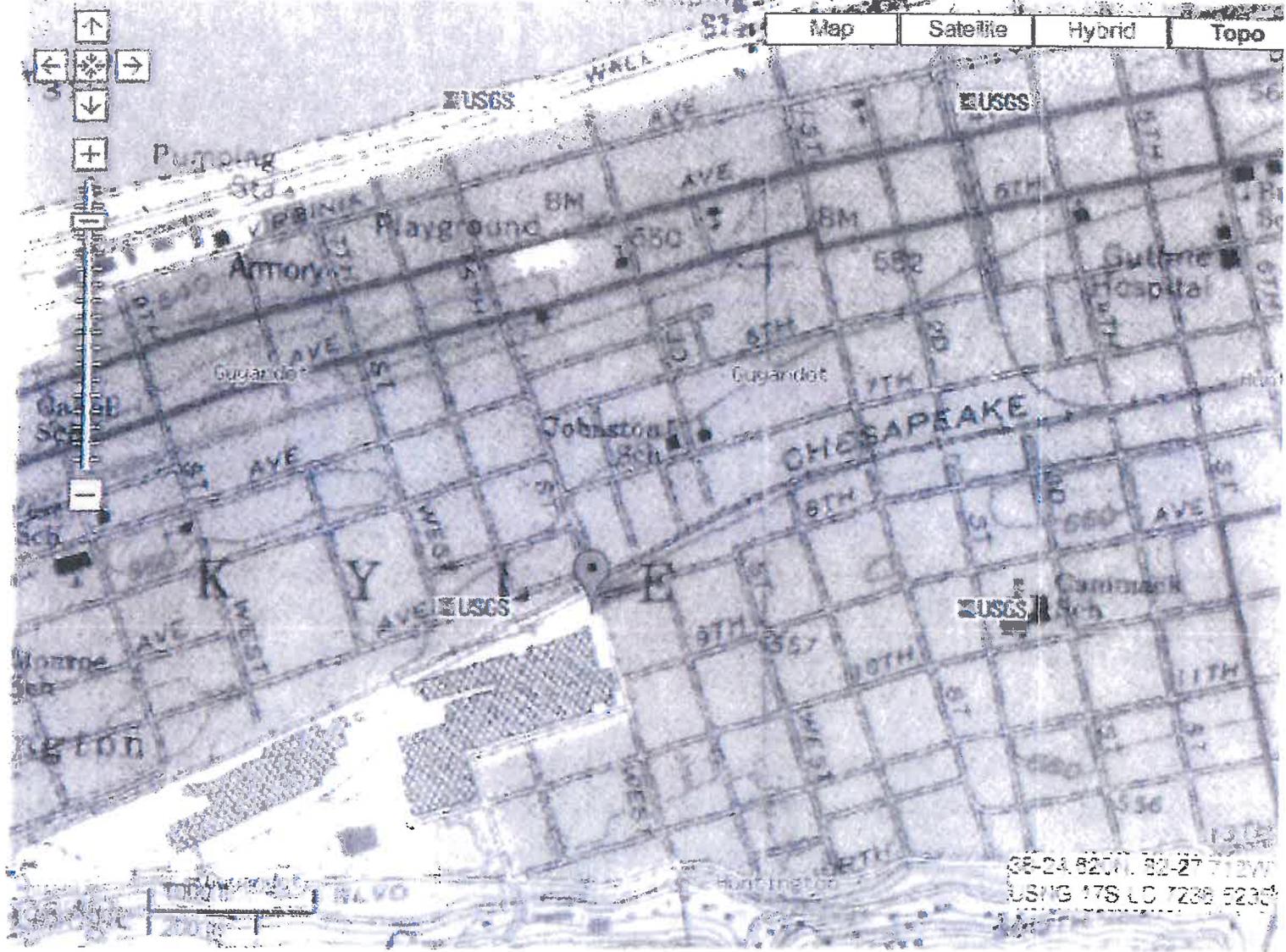
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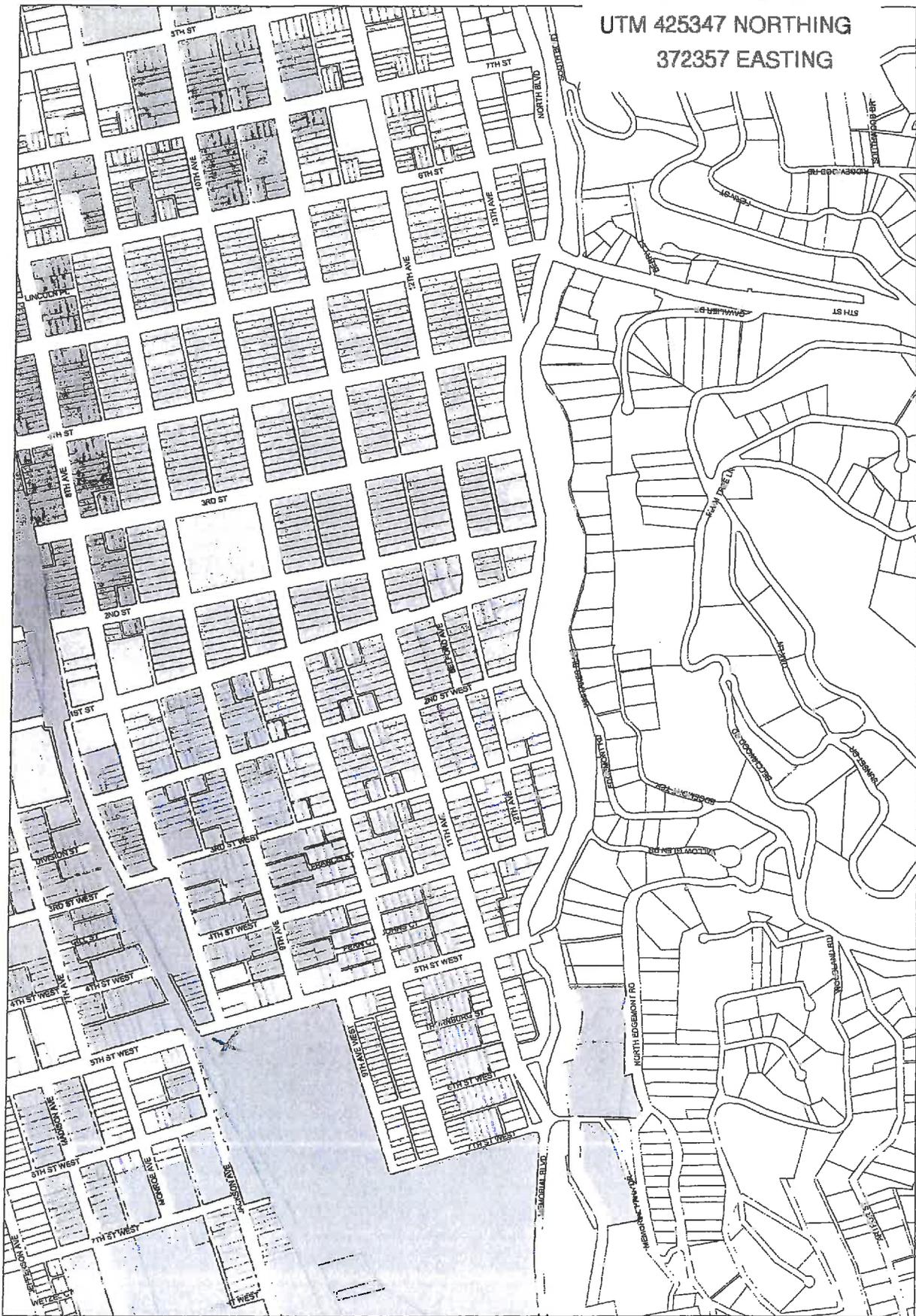
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2,000 Feet  
1,000  
500  
0



**HUNTINGTON**

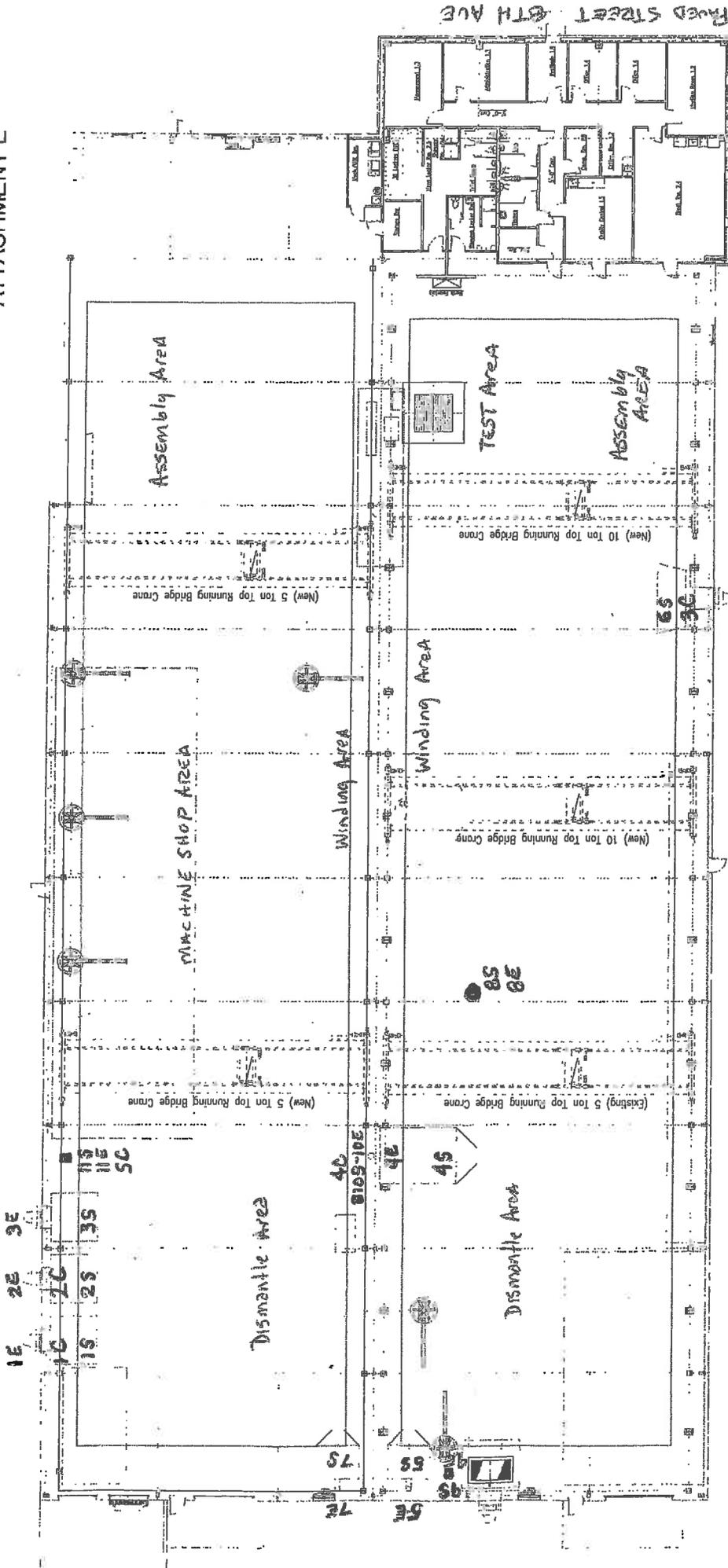
**ZONING**

- BO
- C-1
- C-2
- C-3
- I-1
- R-1
- R-2
- R-4
- R-5

Click on any zoning box above to view zoning ordinance.

4C

ATTACHMENT E



PAVED STREET - 5TH STREET WEST

**FLOOR PLAN**

UTM Northing 4252.347

UTM Easting 372.357

**MAGNETECH INDUSTRIAL SERVICES, INCORPORATED**

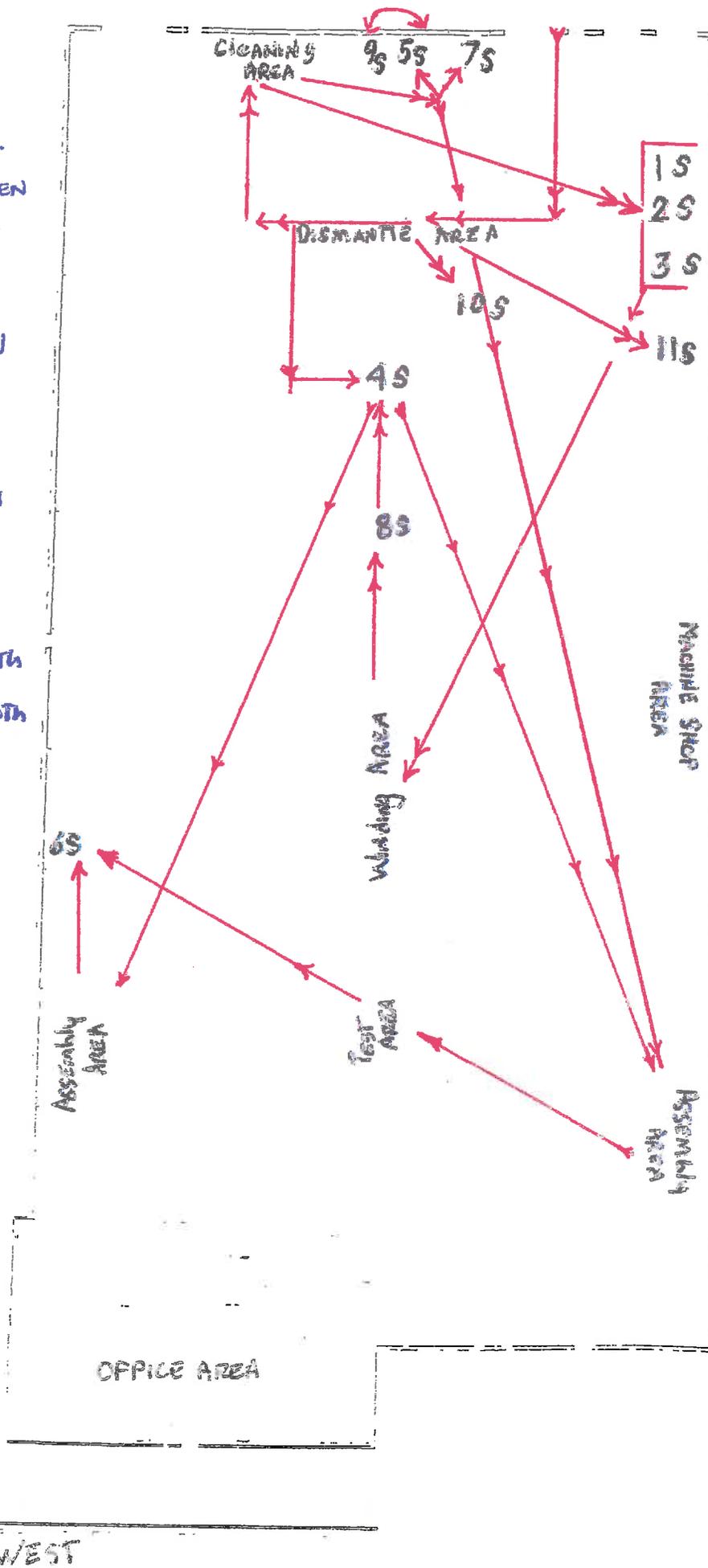
DWG. 1



# Flow OF REPAIRS

## DESCRIPTION OF UNITS

- 1S - Steelman Burnout oven
- 2S - Bayco Burnout oven
- 3S - Ace Burnout oven
- 4S - Steelman Bake oven
- 5S - Bayco Bake oven
- 6S - Binks Paint Booth
- 7S - Bayco Bake oven
- 8S - Imprex VPI
- 9S - Dip Tank
- 10S - Abrasive Blast Booth
- 11S - Abrasive Blast Booth



## Magnetech Industrial Services, Inc

### Flow of Repairs

There are two types of repair in our operations, Reconditions and Rewinds. Below are descriptions of each type.

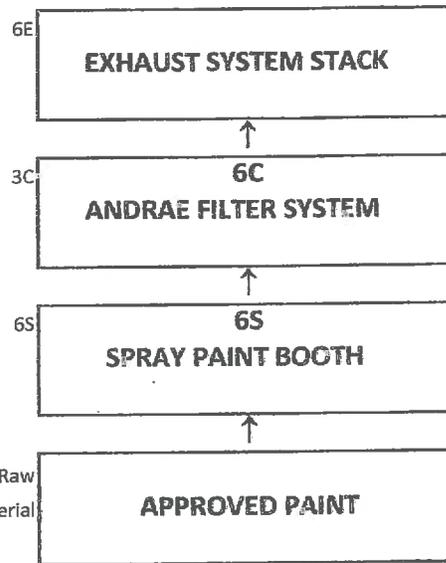
#### RECONDITIONS

- Unit received for repair
- Unit dismantled and inspected
- Components steam cleaned
- Components baked dry in oven(7S, 4S or 5S)
- Component dipped in dip tank (if required) (9S)
- Dipped Component baked in oven (7S,4S OR5S)
- Small parts glass bead cleaned in abrasive cabinet (10S or 11S)
- Unit re-assembled and tested
- Unit painted (6S)

#### REWINDS

- Unit received for repair
- Unit dismantled and inspected
- Components requiring rewind charred in char oven (1S, 2S or 3S)
- Components not requiring rewind steam cleaned and baked dry in oven (7S, 5S or 4S)
- Rewind component – new windings installed – and VPI process winding performed (8S)
- New winding baked after VPI process (7S, 4S, or 5S)
- Small parts glass bead cleaned in abrasive cabinet (10S or 11S)
- Unit re-assembled and tested
- Unit painted (6S)

BINKS SPRAY PAINT BOOTH  
ANDRAE FILTER SYSTEM



Raw  
Material

DOCUMENTATION

SPRAY PAINTING  
IS SCHEDULED



CHOOSE APPROVED PAINT  
FROM POSTED LIST



LOG SHEETS KEPT IN OFFICE  
FILE FOR 1 YEAR AND THEN  
MOVED TO ARCHIVES



PAINT LOG SENT TO OFFICE  
DAILY FOR CALCULATION OF  
AND RECORDING OF VOC'S

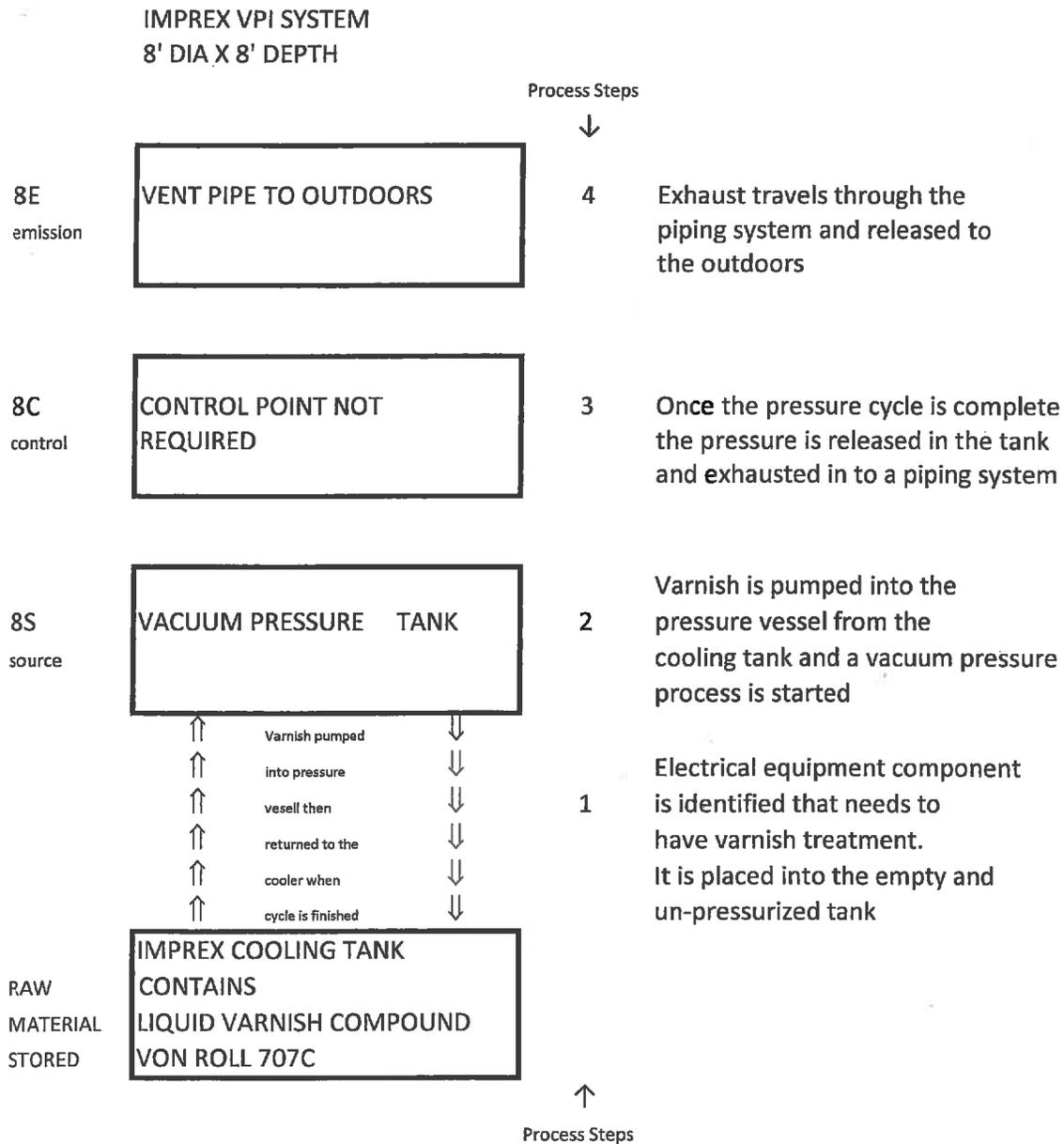


WHEN PAINTING IS COMPLETE  
ENTER TIME SPENT SPRAYING  
ON PAINT LOG

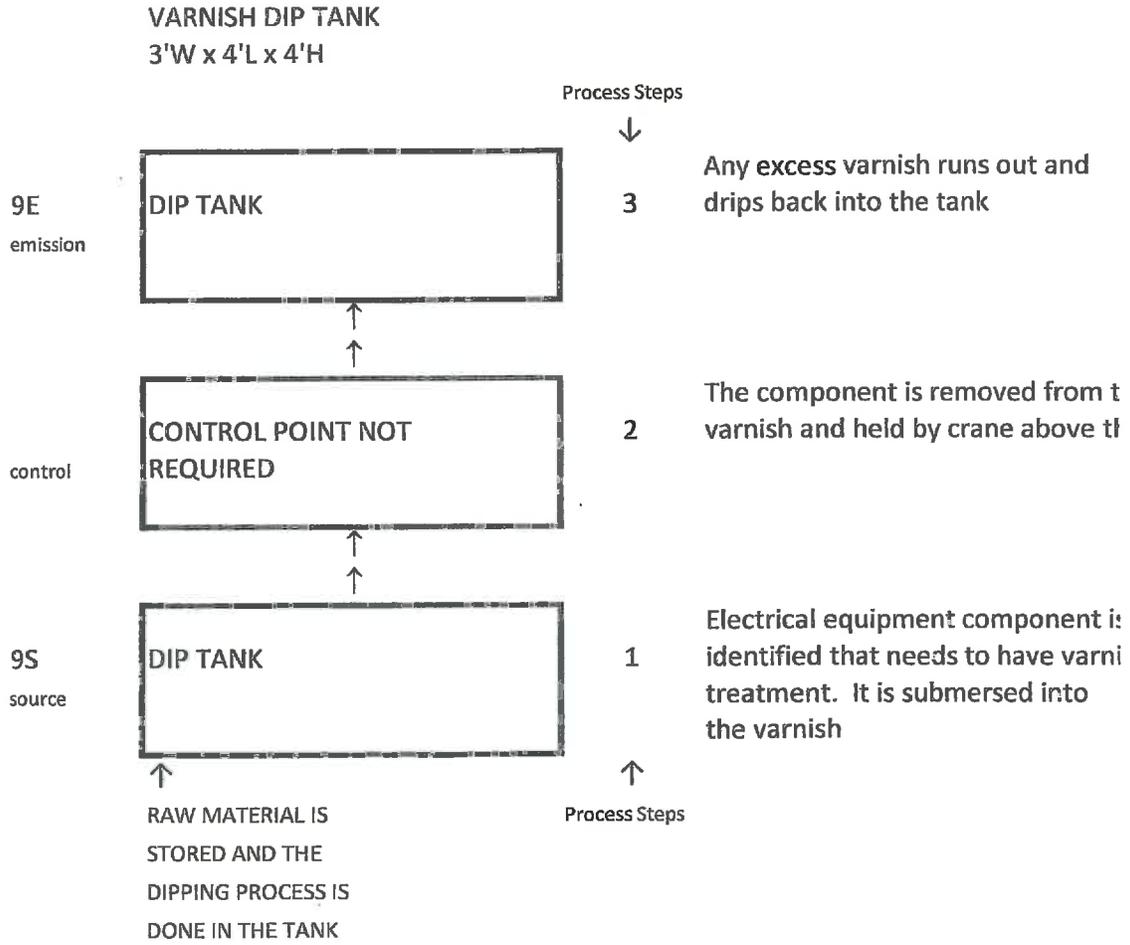


FILL IN PAINT LOG WITH  
EMPLOYEE NAME, PAINT TO BE  
USED AND VOC CONTENT

SOURCE - CONTROL - EMISSION POINT



SOURCE - CONTROL - EMISSION POINT



MATERIAL SAFETY DATA SHEET

F77W8  
21 00

DATE OF PREPARATION  
Nov 29, 2015

**SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION**

SHERWIN WILLIAMS  
PRODUCT NUMBER

F77W8

**PRODUCT NAME**

Quick Dry Enamel, Gloss White

CUSTOM MATCH - SLATE GRAY

65

**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
*for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)	

**SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS**

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
10	64742-89-8	Lt. Aliphatic Hydrocarbon Solvent		
		ACGIH TLV	300 PPM	12 mm
		OSHA PEL	300 PPM	
17	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	
1	64742-95-6	Light Aromatic Hydrocarbons		
		ACGIH TLV	Not Available	3.8 mm
		OSHA PEL	Not Available	
2	95-63-6	1,2,4-Trimethylbenzene		
		ACGIH TLV	25 PPM	2.03 mm
		OSHA PEL	25 PPM	
14	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.

**HMS 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/m<sup>3</sup> (total dust), 3 mg/m<sup>3</sup> (respirable fraction), OSHA PEL 15 mg/m<sup>3</sup> (total dust), 5 mg/m<sup>3</sup> (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**

<b>PRODUCT WEIGHT</b>	8.44 lb/gal	1011 g/l
<b>SPECIFIC GRAVITY</b>	1.02	
<b>BOILING POINT</b>	222 - 360 °F	105 - 182 °C
<b>MELTING POINT</b>	Not Available	
<b>VOLATILE VOLUME</b>	71%	
<b>EVAPORATION RATE</b>	Slower than ether	
<b>VAPOR DENSITY</b>	Heavier than air	
<b>SOLUBILITY IN WATER</b>	Not Available	
<b>VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)</b>		
	4.98 lb/gal 597 g/l	Less Water and Federally Exempt Solvents
	4.97 lb/gal 596 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	Lt. Aliphatic Hydrocarbon Solvent	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
64742-95-6	Light Aromatic Hydrocarbons	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
95-63-6	1,2,4-Trimethylbenzene	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	Titanium Dioxide	LC50 RAT	4HR	Not Available
		LD50 RAT		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. (PAINT OR RELATED).

Larger Containers are Regulated as:

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

## DOT (Dept of Transportation) Hazardous Substances &amp; 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, 3, PG II, LIMITED QUANTITY, (ERG#128)

## IMO

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

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

## IMO

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

UN1263, PAINT, 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	17	
100-41-4	Ethylbenzene	4	
1330-20-7	Xylene	22	
95-63-6	1,2,4-Trimethylbenzene	2	

**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

B66Y11037  
06 00

DATE OF PREPARATION  
Oct 20, 2015

### SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

**SHERWIN WMS** **65**  
**PRODUCT NUMBER**  
 B66Y11037  
**PRODUCT NAME**  
 PRO INDUSTRIAL™ DTM Acrylic Gloss, Safety Yellow  
**MANUFACTURER'S NAME**  
 THE SHERWIN-WILLIAMS COMPANY  
 101 Prospect Avenue N.W.  
 Cleveland, OH 44115

**Telephone Numbers and Websites**

<b>Product Information</b>	(800) 524-5979 www.sherwin-williams.com
<b>Regulatory Information</b>	(216) 566-2902 www.paintdocs.com
<b>Medical Emergency</b>	(216) 566-2917
<b>Transportation Emergency*</b>	(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
0.2	119-61-9	<b>Benzophenone</b>		
		ACGIH TLV	Not Available	
		OSHA PEL	Not Available	
< 0.1	Proprietary	<b>Fluoropolymer</b>		
		ACGIH TLV	Not Available	
		OSHA PEL	Not Available	
6	13463-67-7	<b>Titanium Dioxide</b>		
		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.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.

**SIGNS AND SYMPTOMS OF OVEREXPOSURE**

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.

**HMIS Codes**

<b>Health</b>	2*
<b>Flammability</b>	0
<b>Reactivity</b>	0

**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	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Applicable	Applicable	

**EXTINGUISHING MEDIA**

Carbon Dioxide, Dry Chemical, Alcohol Foam

**UNUSUAL FIRE AND EXPLOSION HAZARDS**

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

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**

Not Applicable

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE**

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/m<sup>3</sup> (total dust), 3 mg/m<sup>3</sup> (respirable fraction), OSHA PEL 15 mg/m<sup>3</sup> (total dust), 5 mg/m<sup>3</sup> (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.

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

PRODUCT WEIGHT	9.03 lb/gal	1081 g/l
SPECIFIC GRAVITY	1.09	
BOILING POINT	212 - 500 °F	100 - 260 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	61%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

**VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)**

0.34 lb/gal	41 g/l	Less Water and Federally Exempt Solvents
0.13 lb/gal	16 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**

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			
119-61-9	Benzophenone	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
Proprietary	Fluoropolymer	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	Titanium Dioxide	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

**SECTION 12 — ECOLOGICAL INFORMATION****ECOTOXICOLOGICAL INFORMATION**

No data available.

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

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. 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)**

Not Regulated for Transportation.

**Canada (TDG)**

Not Regulated for Transportation.

**IMO**

Not Regulated for Transportation.

**IMO**

Not Regulated for Transportation.

**IATA/ICAO**

Not Regulated for Transportation.

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

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
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No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.

**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.

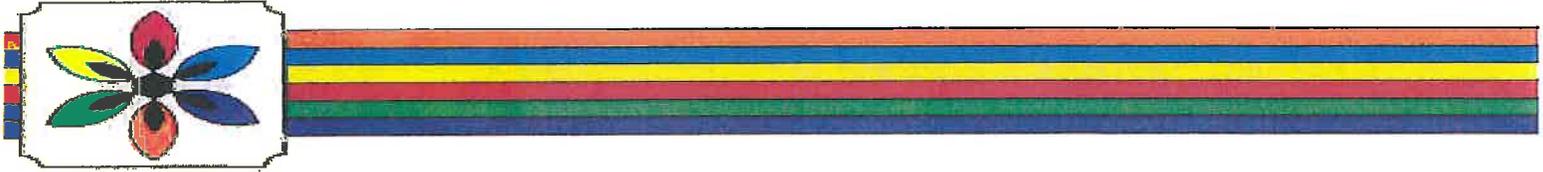
The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control,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

DATE REVISED: //2014  
PRODUCT ID:

DATE PRINTED: 3/15/2016

4 gal

**Columbia Paint Corporation**  
641 Jackson Avenue P.O. Box 2888 Huntington, WV, 25728  
Phone: 304-529-3237, 24-Hour Emergency Phone (ChemTrec): 1-800-424-9300



**SECTION 1: PRODUCT IDENTIFICATION**

513 ANSI YELLOW LF/CF

65

**SECTION 2: HAZARDS IDENTIFICATION**

Potential Health Effects

**EYE:** Contact/Exposure to liquid or high vapor concentrations can cause moderate eye irritation. Symptoms include stinging, tearing, and redness.

**SKIN:** Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns and other damage. Additional symptoms of skin contact may include: skin blistering. Passage of this material into the body through skin is possible, but is unlikely that this would result in harmful side effects during safe handling and use.

**INGESTION:** Ingestion/swallowing of this material during normal handling may cause nausea/vomiting. May be harmful. May be aspirated into lungs. Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other injury.

**INHALATION:** Breathing of vapor or mist during normal handling and use is possible. Breathing small amounts during normal handling is not likely to cause harmful effects. Breathing large amounts during application or misuse of product may be harmful. Avoid air concentrations exceeding recommended exposure limits (see Section 2).

**CHRONIC INFORMATION:** Overexposure to Xylene (or its components) has been suggested as a cause of the following effects in laboratory animals: testis damage, kidney damage, liver damage, overexposure to this Xylene (or its components) has been suggested as a cause of the following effects in humans: central nervous effects

**DEVELOPMENTAL INFORMATION:** Xylene (or its components) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at the exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

**SYMPTOMS OF EXPOSURE:** Signs and symptoms of exposure to this product through breathing, swallowing, and/or passage of product components through the skin may include skin irritation (burning, itching, redness), stomach or intestinal upset, irritation of airways, and central nervous system depression. Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), narcosis (dazed or sluggish feeling).

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS#	% By Wt.	Exposure Limits
SOLVENT NAPHTHA	64742-89-8	46.32	

Pg 20 of 78

DATE REVISED: //2014

DATE PRINTED: 3/15/2016

PAGE 2 of 4

PRODUCT ID:

(PETROLEUM), LIGHT ALIPHATIC			
TITANIUM DIOXIDE	13463-67-7	4.25	OSHA PEL 15 MG/m3 ACGIH TLV 10 MG/m3
XYLENE	1330-20-7	2.24	OSHA PEL 100 PPM ACGIH TLV 100 PPM
SOLVENT NAPHTHA (PETROLEUM), MEDIUM ALIPHATIC	64742-88-7	1.19	OSHA PEL 500 PPM ACGIH TLV 100 PPM
ETHYLBENZENE	100-41-4	0.63	OSHA PEL 100 PPM ACGIH TLV 100 PPM

**SECTION 4: FIRST AID MEASURES**

**EYE:** If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart. Seek immediate medical attention.

**SKIN:** Remove affected clothing. Flush exposed area with large amounts of water. If skin is damaged or if symptoms persist, seek medical attention. Remove affected clothing. Flush exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

**INGESTION:** If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

**INHALATION:** If symptoms develop, move away from exposure and into fresh air. If symptoms persist, keep person warm and quiet, seek medical attention. If breathing is difficult, administer oxygen.

**NOTE TO PHYSICIANS:** Aspiration Hazard, Note hazardous material component(s) (Section 2).

**SECTION 5: FIRE-FIGHTING MEASURES****FLAMMABLE PROPERTIES:**

**FLASH POINT (Range):** No Data. **METHOD:** TCC

**EXPLOSIVE LIMITS (PERCENT BY VOLUME, OF VOLATILE COMPONENT):**

Lower: 1.0

Upper: 7.0

**AUTOIGNITION TEMPERATURE (MINIMUM OF COMPONENTS):** 400 F

**HAZARDOUS COMBUSTION PRODUCTS:** Products of combustion may include carbon monoxide, carbon dioxide, and hydrocarbons.

**EXTINGUISHING MEDIA:** Carbon Dioxide, Dry Chemical for Small Fires. Use Alcohol type or general-purpose foam for Large Fires. Water spray may be ineffective but may be used to cool fire-exposed containers.

**FIREFIGHTING INSTRUCTIONS:** Wear self-contained breathing apparatus with all appropriate turnout gear and chemical resistant protective equipment. Smother to exclude air. Handle as an oil fire.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**PRODUCT SPILL:** Eliminate all sources of ignition. Wear appropriate protective equipment when responding to a spill. Immediately collect and containerize uncontaminated product and use in non-critical

DATE REVISED: //2014

DATE PRINTED: 3/15/2016

PRODUCT ID:

areas if possible. If contaminated (dirt, deleterious materials, etc.), containerize and absorb any residue or unrecoverable product with vermiculite, floor absorbent, etc. For LARGE SPILLS, exclude persons not wearing protective equipment from area. Stop spill at source. Prevent product from spreading and from entering access ways to sewers or other water bodies. Transfer to salvage vessel if possible. Notify supervisors or proper authorities that a spill has occurred. (see Section 13 for Disposal Information)

---

**SECTION 7: HANDLING AND STORAGE**

**HANDLING:** Handle containers (even empty) with caution. Static charge may accumulate on containers. Metal containers (5 gallon or larger) should be grounded and bonded when product is transferred. Do NOT use product near heat, spark, open flame, or other sources of ignition. Empty containers retain product residue (vapor, liquid, and/or solids). Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by ignition sources at locations distant from the handling point. Use recommended PPE when handling containers. Ensure availability of emergency eyewash and shower facilities.

**STORAGE:** Store closed containers in a cool, well-ventilated place, away from ignition sources and incompatible material. Keep containers tightly closed.

---

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Provide sufficient mechanical (general or local exhaust) ventilation to maintain exposure below TLV(s) listed in Section 2. Always provide mechanical ventilation of confined spaces.

**RESPIRATORY PROTECTION:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (section 2), an approved (NIOSH/MSHA) respirator must be worn. Respirator type: chemical cartridge; mist, organic vapor; may be appropriate up to 10X PEL. Consult your safety administrator. Respiratory protection should be used in compliance with OSHA standard 29 CFR 1910.134.

**SKIN PROTECTION:** During handling and application, wear chemical resistant gloves, wear clothing appropriate for the risk of exposure.

**EYE PROTECTION:** During handling and application, minimum recommended protection is safety glasses, with fixed side shields, in compliance with OSHA requirements. Chemical type splash proof goggles are advised.

---

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**BOILING POINT:** 246.0 F

**VAPOR PRESSURE:** No Data.

**VAPOR DENSITY:** Heavier than Air (>1)

**SOLUBILITY IN WATER:** Insoluble in Water

**SPECIFIC GRAVITY:** 0.9303

**pH RANGE:** Not Applicable

**ODOR:** Aliphatic Hydrocarbon Odor

**APPEARANCE:** No Data.

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**SECTION 10: STABILITY AND REACTIVITY**

**CHEMICAL STABILITY:** Stable Product.

**INCOMPATIBILITY (CONDITIONS TO AVOID):** Avoid contact with or exposure to strong oxidizing agents and acids and bases. Avoid possible ignition sources.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Products of decomposition include carbon monoxide, carbon dioxide, and various petroleum hydrocarbons.

**HAZARDOUS POLYMERIZATION:** Product will not undergo hazardous polymerization.

---

**SECTION 11: TOXICOLOGICAL INFORMATION**

**EXPOSURE LIMIT OF MATERIAL:** See Section 2.

**CARCINOGENICITY OF MATERIAL:** ACGIH, IARC, NTP, and/or OSHA have identified the following components as confirmed/suspected human carcinogens: None Reported

**MEDICAL CONDITIONS AGGRAVATED BY OVER EXPOSURE:** Certain preexisting eye, skin, and respiratory disorders may be aggravated by exposure to this product.

DATE REVISED: //2014  
PRODUCT ID:

DATE PRINTED: 3/15/2016

**SECTION 12: ECOLOGICAL INFORMATION**

**ECOTOXICOLOGICAL INFORMATION:** No Data

**CHEMICAL FATE INFORMATION:** No Data.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

**DISPOSAL INFORMATION:** As local regulations may vary, all waste must be disposed of in accordance with federal, state, and local environmental protection regulations. This product is considered a hazardous waste if discarded (by ignitibility, FP < 140 degree F). Preferably, to minimize paint waste, use all the paint in the application process. Store paint properly for future use.

---

**SECTION 14: TRANSPORT INFORMATION**

**DOT:** Proper Shipping Name: Petroleum Distillates, N.O.S. (Aliphatic Petroleum Distillates), 3, UN1268, PG II. Type D.O.T. Label(s): Flammable Liquid, Orientation Arrows. Ship in compliance with the Transportation of Dangerous Goods Act.

**IATA:** Check International Air Transport Associations (IATA) regulations for particular air shipment requirements.

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**SECTION 15: REGULATORY INFORMATION**

**U.S. FEDERAL REGULATIONS:**

**OSHA:** Handling, Storage, and Use of this product, may permit exposure to potentially harmful material. See section 2 for permissible exposure limits (PEL) of component(s) and Section 8 for minimum recommended PPE. Consult 29 CFR for applicable OSHA regulations.

**CERCLA: SARA HAZARD CATEGORY:** Immediate (X) Delayed (X) Fire (X) Reactive ( ) Sudden Release-of-Pressure ( ).

**SECTION 313:** Listed ingredient(s) of this product (Section 2) may be listed as a reportable component under federal regulations. Consult: CERCLA (40 CFR 302.4), SARA 302 (40 CFR 355, Appendix A), and SARA 313 (40 CFR 372.65).

**V.O.C. CALCULATED (EXCLUDING WATER):** 4.0249 lbs/gal

**V.O.C. CALCULATED (INCLUDING WATER & EXEMPT SOLVENT):** 4.0249 lbs/gal

**STATE RIGHT-TO-KNOW:** The following states have Right-to-Know laws that may require user notification of Section 2 ingredients: CA, NJ, PA, MA, CT, FL, LA, NY, RI. Consult appropriate authorities to determine applicability.

---

**SECTION 16: DISCLAIMER:**

The provided information pertains to this product as currently formulated, and is based on information made available to us at this time. Addition of reducers or additives to this product may substantially alter the composition and hazards of this 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.

DATE REVISED: //2014  
PRODUCT ID:

DATE PRINTED: 3/15/2016

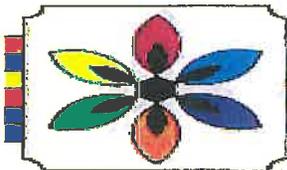
PAGE 1 of 4

ATTACHMENT H-4

**Columbia Paint Corporation**

641 Jackson Avenue P.O. Box 2888 Huntington, WV, 25728

Phone: 304-529-3237, 24-Hour Emergency Phone (ChemTrec): 1-800-424-9300

**SECTION 1: PRODUCT IDENTIFICATION**

20-084A 593NBV MACHINERY GRAY LF

65

**SECTION 2: HAZARDS IDENTIFICATION****Potential Health Effects**

**EYE:** Contact/Exposure to liquid or high vapor concentrations can cause moderate eye irritation. Symptoms include stinging, tearing, and redness.

**SKIN:** Brief exposure may cause mild skin irritation with itching and local redness. Prolonged or repeated exposure may cause more pronounced skin irritation and may dry the skin. Absorption is possible. May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, drying and cracking of skin, and skin burns. Passage of this material into the body through skin is possible, but is unlikely that this would result in harmful side effects during safe handling and use.

**INGESTION:** Ingestion/swallowing of this material during normal handling may cause nausea/vomiting. May be harmful. May be aspirated into lungs. Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave unattended. Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other injury.

**INHALATION:** Breathing of vapor or mist during normal handling and use is possible. Breathing small amounts during normal handling is not likely to cause harmful effects. Breathing large amounts during application or misuse of product may be harmful. Avoid air concentrations exceeding recommended exposure limits (see Section 2). Breathing of vapor or mist is possible. Breathing small amounts of this material is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits. Breathing air containing n-butyl acetate, which results from its use in aerosol applications, may cause lung injury.

**CHRONIC INFORMATION:** Prolonged or repeated exposure to this product without appropriate PPE is potentially harmful.

**DEVELOPMENTAL INFORMATION:** No Data, as a precaution, avoid prolonged or repeated exposure to liquid or vapor. Butyl Acetate-This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

**SYMPTOMS OF EXPOSURE:** Signs and symptoms of exposure to this product through breathing, swallowing, and/or passage of product components through the skin may include skin irritation (burning, itching, redness), stomach or intestinal upset, irritation of airways, and central nervous system depression. Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), narcosis (dazed or sluggish feeling).

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Pg 24 of 78

DATE REVISED: //2014  
PRODUCT ID:

DATE PRINTED: 3/15/2016

PAGE 2 of 4

ATTACHMENT H-4

Component	CAS#	% By Wt.	Exposure Limits
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	16.84	
LIMESTONE	1317-65-3	16.83	OSHA PEL 15 MG/m3 ACGIH TLV 10 MG/m3
BUTYL ACETATE	123-86-4	9.9	OSHA PEL 150 PPM ACGIH TLV 150 PPM
TITANIUM DIOXIDE	13463-67-7	6.71	OSHA PEL 15 MG/m3 ACGIH TLV 10 MG/m3
SOLVENT NAPHTHA (PETROLEUM), MEDIUM ALIPHATIC	64742-88-7	5.12	OSHA PEL 500 PPM ACGIH TLV 100 PPM
AROMATIC HYDROCARBONS	64742-94-5	1.52	
CARBON BLACK	1333-86-4	0.31	OSHA PEL 3.5 MG/m3 ACGIH TLV 3.5 MG/m3
ETHYLBENZENE	100-41-4	0.17	OSHA PEL 100 PPM ACGIH TLV 100 PPM
NAPHTHALENE	91-20-3	0.11	ACGIH TLV 10 PPM OSHA PEL 10 PPM

**SECTION 4: FIRST AID MEASURES**

**EYE:** If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart. Seek immediate medical attention.

**SKIN:** Remove affected clothing. Wash affected skin with soap and water. If symptoms persist, seek medical attention. Remove affected clothing. Flush exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

**INGESTION:** If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

**INHALATION:** If symptoms develop, move away from exposure and into fresh air. If symptoms persist, keep person warm and quiet, seek medical attention. If breathing is difficult, administer oxygen.

**NOTE TO PHYSICIANS:** Aspiration Hazard, Note hazardous material component(s) (Section 2).

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## SECTION 5: FIRE-FIGHTING MEASURES

### FLAMMABLE PROPERTIES:

**FLASH POINT (Range):** No Data.    **METHOD:** TCC

**EXPLOSIVE LIMITS (PERCENT BY VOLUME, OF VOLATILE COMPONENT):**

Lower: 1.0

Upper: 7.0

**AUTOIGNITION TEMPERATURE (MINIMUM OF COMPONENTS):** 400 F

**HAZARDOUS COMBUSTION PRODUCTS:** Products of combustion may include carbon monoxide, carbon dioxide, and hydrocarbons.

**EXTINGUISHING MEDIA:** Carbon Dioxide, Dry Chemical for Small Fires. Use Alcohol type or general-purpose foam for Large Fires. Water spray may be ineffective but may be used to cool fire-exposed containers.

**FIREFIGHTING INSTRUCTIONS:** Wear self-contained breathing apparatus with all appropriate turnout gear and chemical resistant protective equipment. Smother to exclude air. Handle as an oil fire.

---

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**PRODUCT SPILL:** Eliminate all sources of ignition. Wear appropriate protective equipment when responding to a spill. Immediately collect and containerize uncontaminated product and use in non-critical areas if possible. If contaminated (dirt, deleterious materials, etc.), containerize and absorb any residue or unrecoverable product with vermiculite, floor absorbent, etc. For LARGE SPILLS, exclude persons not wearing protective equipment from area. Stop spill at source. Prevent product from spreading and from entering access ways to sewers or other water bodies. Transfer to salvage vessel if possible. Notify supervisors or proper authorities that a spill has occurred. (see Section 13 for Disposal Information)

---

## SECTION 7: HANDLING AND STORAGE

**HANDLING:** Handle containers (even empty) with caution. Static charge may accumulate on containers. Metal containers (5 gallon or larger) should be grounded and bonded when product is transferred. Do NOT use product near heat, spark, open flame, or other sources of ignition. Empty containers retain product residue (vapor, liquid, and/or solids). Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by ignition sources at locations distant from the handling point. Use recommended PPE when handling containers. Ensure availability of emergency eyewash and shower facilities.

**STORAGE:** Store closed containers in a cool, well-ventilated place, away from ignition sources and incompatible material. Keep containers tightly closed.

---

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Provide sufficient mechanical (general or local exhaust) ventilation to maintain exposure below TLV(s) listed in Section 2. Always provide mechanical ventilation of confined spaces.

**RESPIRATORY PROTECTION:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (section 2), an approved (NIOSH/MSHA) respirator must be worn. Respirator type: chemical cartridge; mist, organic vapor; may be appropriate up to 10X PEL. Consult your safety administrator. Respiratory protection should be used in compliance with OSHA standard 29 CFR 1910.134.

**SKIN PROTECTION:** During handling and application, wear chemical resistant gloves, wear clothing appropriate for the risk of exposure.

**EYE PROTECTION:** During handling and application, minimum recommended protection is chemical splash proof goggles in compliance with OSHA regulations. Other type(s) safety glasses may be permitted, consult your safety administrator.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**BOILING POINT:** 246.0 F

**VAPOR PRESSURE:** No Data.

**VAPOR DENSITY:** Heavier than Air (>1)

DATE REVISED: //2014  
PRODUCT ID:

DATE PRINTED: 3/15/2016

PAGE 4 of 4

ATTACHMENT H-4

**SOLUBILITY IN WATER:** Insoluble in Water  
**SPECIFIC GRAVITY:** 1.0995  
**pH RANGE:** Not Applicable  
**ODOR:** Aliphatic Hydrocarbon Odor  
**APPEARANCE:** No Data.

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**SECTION 10: STABILITY AND REACTIVITY****CHEMICAL STABILITY:** Stable Product.**INCOMPATIBILITY (CONDITIONS TO AVOID):** Avoid contact with or exposure to strong oxidizing agents and acids and bases. Avoid possible ignition sources.**HAZARDOUS DECOMPOSITION PRODUCTS:** Products of decomposition include carbon monoxide, carbon dioxide, and various petroleum hydrocarbons.**HAZARDOUS POLYMERIZATION:** Product will not undergo hazardous polymerization.

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**SECTION 11: TOXICOLOGICAL INFORMATION****EXPOSURE LIMIT OF MATERIAL:** See Section 2.**CARCINOGENICITY OF MATERIAL:** ACGIH, IARC, NTP, and/or OSHA have identified the following components as confirmed/suspected human carcinogens: None Reported**MEDICAL CONDITIONS AGGRAVATED BY OVER EXPOSURE:** Certain preexisting eye, skin, and respiratory disorders may be aggravated by exposure to this product.

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**SECTION 12: ECOLOGICAL INFORMATION****ECOTOXICOLOGICAL INFORMATION:** No specific ecological data are available for this product. Please refer to Section 6 for information regarding accidental releases and Section 15 for regulatory reporting.**CHEMICAL FATE INFORMATION:** No Data.

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**SECTION 13: DISPOSAL CONSIDERATIONS****DISPOSAL INFORMATION:** As local regulations may vary, all waste must be disposed of in accordance with federal, state, and local environmental protection regulations. This product is considered a hazardous waste if discarded (by ignitibility, FP < 140 degree F). Preferably, to minimize paint waste, use all the paint in the application process. Store paint properly for future use.

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**SECTION 14: TRANSPORT INFORMATION****DOT:** Proper Shipping Name: Petroleum Distillates, N.O.S. (Aliphatic Petroleum Distillates), 3, UN1268, PG II. Type D.O.T. Label(s): Flammable Liquid, Orientation Arrows. Ship in compliance with the Transportation of Dangerous Goods Act.**IATA:** Check International Air Transport Associations (IATA) regulations for particular air shipment requirements.

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**SECTION 15: REGULATORY INFORMATION****U.S. FEDERAL REGULATIONS:****OSHA:** Handling, Storage, and Use of this product, may permit exposure to potentially harmful material. See section 2 for permissible exposure limits (PEL) of component(s) and Section 8 for minimum recommended PPE. Consult 29 CFR for applicable OSHA regulations.**CERCLA: SARA HAZARD CATEGORY:** Immediate (X) Delayed (X) Fire (X) Reactive ( ) Sudden Release-of-Pressure ( )**SECTION 313:** Listed ingredient(s) of this product (Section 2) may be listed as a reportable component under federal regulations. Consult: CERCLA (40 CFR 302.4), SARA 302 (40 CFR 355, Appendix A), and SARA 313 (40 CFR 372.65).**V.O.C. CALCULATED (EXCLUDING WATER):** 3.2484 lbs/gal**V.O.C. CALCULATED (INCLUDING WATER & EXEMPT SOLVENT):** 3.2484 lbs/gal**STATE RIGHT-TO-KNOW:** The following states have Right-to-Know laws that may require user notification of Section 2 ingredients: CA, NJ, PA, MA, CT, FL, LA, NY, RI. Consult appropriate authorities to determine applicability.

DATE REVISED: //2014  
PRODUCT ID:

DATE PRINTED: 3/15/2016

PAGE 5 of 4

ATTACHMENT H-4

**SECTION 16: DISCLAIMER:**

The provided information pertains to this product as currently formulated, and is based on information made available to us at this time. Addition of reducers or additives to this product may substantially alter the composition and hazards of this 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.

DATE REVISED: //2014  
 PRODUCT ID:

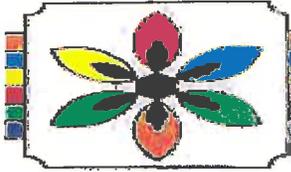
DATE PRINTED: 3/15/2016

PAGE 1 of 4

**Columbia Paint Corporation**  
 641 Jackson Avenue P.O. Box 2888 Huntington, WV, 25728  
 Phone: 304-529-3237, 24-Hour Emergency Phone (ChemTrec): 1-800-424-9300

31 gal

ATTACHMENT H-5



**SECTION 1: PRODUCT IDENTIFICATION**

**XYLENE**

65 ?

**SECTION 2: HAZARDS IDENTIFICATION**

Potential Health Effects

**EYE:** Contact/Exposure to liquid or high vapor concentrations can cause moderate eye irritation. Symptoms include stinging, tearing, and redness.

**SKIN:** Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns and other damage. Additional symptoms of skin contact may include: skin blistering. Passage of this material into the body through skin is possible, but is unlikely that this would result in harmful side effects during safe handling and use.

**INGESTION:** Ingesting or swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

**INHALATION:** Breathing of vapor or mist during normal handling and use is possible. Breathing small amounts during normal handling is not likely to cause harmful effects. Breathing large amounts during application or misuse of product may be harmful. Avoid air concentrations exceeding recommended exposure limits (see Section 2).

**CHRONIC INFORMATION:** Overexposure to Xylene (or its components) has been suggested as a cause of the following effects in laboratory animals: testis damage, kidney damage, liver damage, overexposure to this Xylene (or its components) has been suggested as a cause of the following effects in humans: central nervous effects

**DEVELOPMENTAL INFORMATION:** Xylene (or its components) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at the exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

**SYMPTOMS OF EXPOSURE:** Signs and symptoms of exposure to this product through breathing, swallowing, and/or passage of product components through the skin may include skin irritation (burning, itching, redness), stomach or intestinal upset, irritation of airways, and central nervous system depression.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS#	% By Wt.	Exposure Limits
XYLENE	1330-20-7	80	OSHA PEL 100 PPM ACGIH TLV 100 PPM
ETHYLBENZENE	100-41-4	20	OSHA PEL 100 PPM ACGIH TLV 100 PPM

PG 29 of 78

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**SECTION 4: FIRST AID MEASURES**

**EYE:** If symptoms develop, remove from exposure. Flush eyes with water for at least 15 minutes while holding eyelids open. If symptoms persist, seek immediate medical attention.

**SKIN:** Remove affected clothing. Flush exposed area with large amounts of water. If skin is damaged or if symptoms persist, seek medical attention.

**INGESTION:** If symptoms develop, seek medical attention/advice. Do not induce vomiting. This product contains an aspiration hazard. Maintain head below hips to prevent aspiration.

**INHALATION:** If symptoms develop, move away from exposure and into fresh air. If symptoms persist, keep person warm and quiet, seek medical attention. If breathing is difficult, administer oxygen.

**NOTE TO PHYSICIANS:** Aspiration Hazard, Note hazardous material component(s) (Section 2).

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**SECTION 5: FIRE-FIGHTING MEASURES****FLAMMABLE PROPERTIES:**

**FLASH POINT (Range):** No Data.     **METHOD:** TCC

**EXPLOSIVE LIMITS (PERCENT BY VOLUME, OF VOLATILE COMPONENT):**

Lower: 1.0

Upper: 7.0

**AUTOIGNITION TEMPERATURE (MINIMUM OF COMPONENTS):** 400 F

**HAZARDOUS COMBUSTION PRODUCTS:** Products of combustion may include carbon monoxide, carbon dioxide, various petroleum hydrocarbons, and various paint pigments and additives.

**EXTINGUISHING MEDIA:** Carbon Dioxide, Dry Chemical for Small Fires. Use Alcohol type or general-purpose foam for Large Fires. Water spray may be ineffective but may be used to cool fire-exposed containers.

**FIREFIGHTING INSTRUCTIONS:** Wear self-contained breathing apparatus with all appropriate turnout gear and chemical resistant protective equipment. Smother to exclude air. Handle as an oil fire.

---

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**PRODUCT SPILL:** Eliminate all sources of ignition. Wear appropriate protective equipment when responding to a spill. Immediately collect and containerize uncontaminated product and use in non-critical areas if possible. If contaminated (dirt, deleterious materials, etc.), containerize and absorb any residue or unrecoverable product with vermiculite, floor absorbent, etc. For LARGE SPILLS, exclude persons not wearing protective equipment from area. Stop spill at source. Prevent product from spreading and from entering access ways to sewers or other water bodies. Transfer to salvage vessel if possible. Notify supervisors or proper authorities that a spill has occurred. (see Section 13 for Disposal Information)

---

**SECTION 7: HANDLING AND STORAGE**

**HANDLING:** Handle containers (even empty) with caution. Static charge may accumulate on containers. Metal containers (5 gallon or larger) should be grounded and bonded when product is transferred. Do NOT use product near heat, spark, open flame, or other sources of ignition. Empty containers retain product residue (vapor, liquid, and/or solids). Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by ignition sources at locations distant from the handling point. Use recommended PPE when handling containers. Ensure availability of emergency eyewash and shower facilities.

**STORAGE:** Store closed containers in a cool, well-ventilated place, away from ignition sources and incompatible material. Keep containers tightly closed.

---

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Provide sufficient mechanical (general or local exhaust) ventilation to maintain exposure below TLV(s) listed in Section 2. Always provide mechanical ventilation of confined spaces.

DATE REVISED: //2014  
PRODUCT ID:

DATE PRINTED: 3/15/2016

PAGE 3 of 4  
ATTACHMENT H-5

**RESPIRATORY PROTECTION:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (section 2), an approved (NIOSH/MSHA) respirator must be worn. Respirator type: chemical cartridge; mist, organic vapor; may be appropriate up to 10X PEL. Consult your safety administrator. Respiratory protection should be used in compliance with OSHA standard 29 CFR 1910.134.

**SKIN PROTECTION:** During handling and application, wear chemical resistant gloves, wear clothing appropriate for the risk of exposure.

**EYE PROTECTION:** During handling and application, minimum recommended protection is safety glasses, with fixed side shields, in compliance with OSHA requirements. Chemical type splash proof goggles are advised.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****BOILING POINT:** 279.0 F**VAPOR PRESSURE:** (for product) 2.5 mmHg @ 68 degree F.**VAPOR DENSITY:** Heavier than Air (>1)**SOLUBILITY IN WATER:** Insoluble in Water**SPECIFIC GRAVITY:** 0.8683**pH RANGE:** Range: 8.0 - 9.0**ODOR:** Aromatic/Ester Odor**APPEARANCE:** White Viscous Material

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**SECTION 10: STABILITY AND REACTIVITY****CHEMICAL STABILITY:** Stable Product.**INCOMPATIBILITY (CONDITIONS TO AVOID):** Avoid contact with or exposure to strong oxidizing agents and acids and bases. Avoid possible ignition sources.**HAZARDOUS DECOMPOSITION PRODUCTS:** Products of decomposition include carbon monoxide, carbon dioxide, and various petroleum hydrocarbons.**HAZARDOUS POLYMERIZATION:** Product will not undergo hazardous polymerization.

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**SECTION 11: TOXICOLOGICAL INFORMATION****EXPOSURE LIMIT OF MATERIAL:** See Section 2.**CARCINOGENICITY OF MATERIAL:** ACGIH, IARC, NTP, and/or OSHA have identified the following components as confirmed suspected human carcinogens:**MEDICAL CONDITIONS AGGRAVATED BY OVER EXPOSURE:** Certain preexisting eye, skin, and respiratory disorders may be aggravated by exposure to this product.

---

**SECTION 12: ECOLOGICAL INFORMATION****ECOTOXICOLOGICAL INFORMATION:** No Data**CHEMICAL FATE INFORMATION:** No Data.

---

**SECTION 13: DISPOSAL CONSIDERATIONS**

**DISPOSAL INFORMATION:** As local regulations may vary, all waste must be disposed of in accordance with federal, state, and local environmental protection regulations. This product is considered a hazardous waste if discarded (by ignitibility, FP < 140 degree F). Preferably, to minimize paint waste, use all the paint in the application process. Store paint properly for future use.

---

**SECTION 14: TRANSPORT INFORMATION**

**DOT:** Proper Shipping Name: Paint, 3, UN1263, PGIII. Type D.O.T. Label(s): Flammable Liquid, Orientation Arrows. Ship in compliance with the Transportation of Dangerous Goods Act.

**IATA:** Check International Air Transport Associations (IATA) regulations for particular air shipment requirements.

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**SECTION 15: REGULATORY INFORMATION**

U.S. FEDERAL REGULATIONS:

DATE REVISED: //2014  
PRODUCT ID:

DATE PRINTED: 3/15/2016

PAGE 4 of 4

ATTACHMENT H-5

**OSHA:** Handling, Storage, and Use of this product, may permit exposure to potentially harmful material. See section 2 for permissible exposure limits (PEL) of component(s) and Section 8 for minimum recommended PPE. Consult 29 CFR for applicable OSHA regulations.

**CERCLA: SARA HAZARD CATEGORY:** Immediate (X) Delayed (X) Fire (X) Reactive ( ) Sudden Release-of-Pressure ( ).

**SECTION 313:** Listed ingredient(s) of this product (Section 2) may be listed as a reportable component under federal regulations. Consult: CERCLA (40 CFR 302.4), SARA 302 (40 CFR 355, Appendix A), and SARA 313 (40 CFR 372.65).

**V.O.C. CALCULATED (EXCLUDING WATER):** 7.2300 lbs/gal

**V.O.C. CALCULATED (INCLUDING WATER & EXEMPT SOLVENT):** 7.2300 lbs/gal

**STATE RIGHT-TO-KNOW:** The following states have Right-to-Know laws that may require user notification of Section 2 ingredients: CA, NJ, PA, MA, CT, FL, LA, NY, RI. Consult appropriate authorities to determine applicability.

---

**SECTION 16: DISCLAIMER:**

The provided information pertains to this product as currently formulated, and is based on information made available to us at this time. Addition of reducers or additives to this product may substantially alter the composition and hazards of this 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.

# Varnish

Permafil® 707 VPI 85

- ▶ Flexible in stressful applications; protects windings in harsh thermal and mechanical shock environments
- ▶ Excellent coverage and retention
- ▶ Good processing characteristics
- ▶ Low weight loss during heat aging
- ▶ Exceptional electrical properties

**General description**

Permafil® 707 solventless polyester resin is a semi-rigid resin system designated primarily for vacuum-pressure impregnation of both form wound and random wound motors. Its high thermal capability coupled with its excellent electrical properties over a wide temperature range make this resin system suitable for both AC and DC applications.

**Application**

Developed primarily for use in severe duty applications, Permafil® 707 is very useful treating motors, generators, and transformers that require a high degree of reliability. The 1.5 mil typical build, resistance to cracking under thermal cycling, coupled with excellent chemical resistance provide a level of performance not usually expected with a polyester resin system.

**Processing**

Permafil® 707 resin can be used in conventional or automated dip and bake process and in VI or VPI equipment. For suggested cycle times and process specifics, please contact Von Roll USA, Inc.

Suggested Cure Cycle: 3-4 hours at 302°F (150°C) or 1-2 hours at 320°F (160°C).

**Order Data**

Permafil® 707 resin is available catalyzed in totes or 55-gallon drums or un-catalyzed in 5 gallon containers or 55 gallon drums from Von Roll USA, Inc. or from authorized Von Roll distributors. For the name of your distributor or for more information on this product, contact our Customer Service department, (518) 344-7100.

**Health and safety**

Material Safety Data Sheets defining the known hazards and describing safety precautions appropriate for this product are available upon request from Von Roll USA, Inc., 200 Von Roll Drive, Schenectady, New York 12306 (518) 344-7100. Similar information sheets for solvents and other chemicals used with this product may be obtained from the appropriate supplier and used accordingly.

**Storage Conditions**

Permafil® 707 resin can be expected to stay within its specified gel time limits when stored un-catalyzed (707A) for up to 8 months or catalyzed (707C) for up to 6 months at 40°F (7°C). It can also be stored un-catalyzed (707A) for up to 6 months or catalyzed (707C) for up to 3 months at 77°F (25°C).

		Value (Default)	Value (1% Dicumyl Peroxide)	Value (After curing)	Test norm
<b>Physical properties</b>					
Volatile content	lbs/gal. (kg)	≤2.45 (1.11)			ASTM D-6053
Flash point	°F (°C)	127 (53)			Pensky-Martens Closed Cup
Film build on steel (avg.)	mils (mm)	1.5 (0.038)			
Gel time (Sunshine) @ 118°C	minutes		23 ± 7		
Viscosity Reducer		Vinyl Toluene			
Viscosity (Brookfield) 77°F (25°C)	cps	1050 ± 150			
<b>Weight</b>					
Solids content	%	100			
<b>Thermal properties</b>					
Weight loss ; 1000 hours @ 200°C	%	4.2			
Thermal index	°C	180			IEEE #57
<b>Weight</b>					
Total weight	lbs/gal. (kg)	8.95 (4.06)			
<b>Mechanical properties</b>					
Bond Strength (Helical Coil) MW-35 @ 25°C	lbs(N)			33(147)	ASTM D-2519
Bond Strength (Helical Coil) MW-35 @ 155°C	lbs(N)			8 (35.6)	ASTM D-2519
Heat distortion temperature	°F (°C)	140 (60)			
<b>Electrical properties</b>					
Dielectric constant; 60Hz, 77°F (25°C)		2.5			ASTM D-150
Dielectric strength after 24 h storage in water at 23°C	V/mil(kV/mm)			3100 (122)	
Dissipation factor @ 25°C tan delta	%	0.4			ASTM D-150
Dissipation factor @ 125°C tan delta	%	2.2			ASTM D-150
Dielectric strength, Short Time	V/mil(kV/mm)			4000 (157)	ASTM D-115
Dissipation factor @ 155°C tan delta	%	1.9			ASTM D-150
Dissipation factor @ 170°C tan delta	%	2.1			ASTM D-150

### Specifications

The properties shown above are typical values only, and should not be used as a basis for preparing specifications. Contact our Customer Service department, (518) 344-7100 for assistance in preparation of specifications for your specific system application.

The product properties set forth in this data sheet are based on the results of testing of typical material produced by the affiliated companies of Von Roll Holding Ltd. (underneath referred as Von Roll). Some variation in product properties is typical. Comments or suggestions relating to any subject other than product properties are offered only to call the end-user's or other person's attention to considerations which may be relevant in the independent determination of the use and/or manner of use of product. Von Roll does not claim or warrant that the use of its product will have the results described in this data sheet or that the information provided is complete, accurate or useful. The user should test the product to determine its properties and its suitability for the intended use. Von Roll expressly disclaims any liability for any damage, harm, injury, cost or expense to any person resulting directly or indirectly from that person's reliance on any information contained in this data sheet. Nothing contained in this data sheet constitutes representation or warranty as to any matter whatsoever. Von Roll makes no warranties whatsoever in this data sheet, expressed or implied, including any implied warranty or fitness for a particular use or purpose. Von Roll shall in no event be liable for incidental, exemplary, punitive or consequential damages.

## resin

ATTACHMENT H-6

MSDS VPI VARNISH

## Permafil® 707

- ▶ Flexible in stressful applications; protects windings in harsh thermal and mechanical shock environments
- ▶ Excellent coverage and retention
- ▶ Good processing characteristics
- ▶ Low weight loss during heat aging
- ▶ Exceptional electrical properties

## General description

Permafil® 707 solventless polyester resin is a semi-rigid resin system designated primarily for vacuum-pressure impregnation of both form wound and random wound motors. Its high thermal capability coupled with its excellent electrical properties over a wide temperature range make this resin system suitable for both AC and DC applications.

## Application

Developed primarily for use in severe duty applications, Permafil® 707 is very useful treating motors, generators, and transformers that require a high degree of reliability. The 1.5 mil typical build, resistance to cracking under thermal cycling, coupled with excellent chemical resistance provide a level of performance not usually expected with a polyester resin system.

## Processing

Permafil® 707 resin can be used in conventional or automated dip and bake process and in VI or VPI equipment. For suggested cycle times and process specifics, please contact Von Roll USA, Inc.

Suggested Cure Cycle: 3-4 hours at 302°F (150°C) or 1-2 hours at 320°F (160°C)

## Average helical coil bond strength after 168 hour immersion

Control		20% Sodium Sulfate		30% Hydrochloric Acid		20% Potassium Chloride		30% Sulfuric Acid		20% Ammonium Nitrate		20% Ammonium Sulfate	
R.T.	165*	R.T.	165*	R.T.	165*	R.T.	165*	R.T.	155*	R.T.	165*	R.T.	165*
54.0	9.0	27.7	6.8	38.3	3.9	32.5	6.0	63.6	9.1	16.1	8.1	43.5	8.1
10% Sodium Chloride		White Liquor		Black Liquor		Green Liquor		20% Muriate of Potash		6% Boric Acid		15% Potassium Sulfate	
R.T.	165*	R.T.	165*	R.T.	165*	R.T.	165*	R.T.	155*	R.T.	165*	R.T.	165*
35.3	7.8	26.3	6.0	50.7	9.1	42.6	9.0	30.9	6.9	29.6	7.7	31.3	6.6

Von Roll USA, Inc.  
Schenectady, NY 12306, USA  
www.vonroll.com

707

KBA 31C1D 12-09-2006

## Order Data

Permafil® 707 resin is available pre-catalyzed in totes or 55-gallon drums or un-catalyzed in 5 gallon containers or 55 gallon drums from Von Roll USA, Inc. or from authorized Von Roll distributors. For the name of your distributor or for more information on this product, contact our Customer Service department, (518) 344-7100.

## Health and safety

Material Safety Data Sheets defining the known hazards and describing safety precautions appropriate for this product are available upon request from Von Roll USA, Inc., 200 Von Roll Drive, Schenectady, New York 12306 (518) 344-7100. Similar information sheets for solvents and other chemicals used with this product may be obtained from the appropriate supplier and used accordingly.

## Storage Conditions

Permafil® 707 resin can be expected to stay within its specified gel time limits when stored pre-catalyzed for up to 8 months or catalyzed for up to 6 months at 77°F (25°C)

## Specifications

The properties shown above are typical values only, and should not be used as a basis for preparing specifications. Contact our Customer Service department, (518) 344-7100 for assistance in preparation of specifications for your specific system application.

The product properties set forth in this data sheet are based on the results of testing of typical material produced by the affiliated companies of Von Roll Holding Ltd. (underneath referred as Von Roll). Some variation in product properties is typical. Comments or suggestions relating to any subject other than product properties are offered only to call the end-user's or other person's attention to considerations which may be relevant in the independent determination of the use and/or manner of use of product. Von Roll does not claim or warrant that the use of its product will have the results described in this data sheet or that the information provided is complete, accurate or useful. The user should test the product to determine its properties and its suitability for the intended use. Von Roll expressly disclaims any liability for any damage, harm, injury, cost or expense to any person resulting directly or indirectly from that person's reliance on any information contained in this data sheet. Nothing contained in this data sheet constitutes representation or warranty as to any matter whatsoever. Von Roll makes no warranties whatsoever in this data sheet, expressed or implied, including any implied warranty of fitness for a particular use or purpose. Von Roll shall in no event be liable for incidental, exemplary, punitive or consequential damages.

	Value (Default)	Value (1% Dicumyl Peroxide)	Value (After curing)	Test nom
<b>Physical properties</b>				
Flash point	*F (°C)	≥132 (55.8)		Pensky-Martens Closed Cup
<b>Weight</b>				
Solids content	%	100		
Total weight	lbs/gal. (kg)	8.95 (4.06)		
<b>Physical properties</b>				
Gel time (Sunshine) @ 118°C	minutes		19 ± 8	
Volatile content	lbs/gal. (kg)	≤2.45 (1.11)		ASTM D-6053
Viscosity (Brookfield) 77°F (25°C)	cps	1050 ± 150		
Film build on steel (avg.)	mils (mm)	1.5 (0.038)		
Viscosity Reducer		Vinyl Toluene		
<b>Mechanical properties</b>				
Bond Strength (Helical Coil) MW-35 @ 25°C	lbs(N)		41(182)	ASTM D-2519
Bond Strength (Helical Coil) MW-35 @ 180°C	lbs(N)		5 (22.2)	ASTM D-2519
Bond Strength (helical coil) MW-35 @ 100°C	lbs(N)		17 (75.8)	ASTM D-2519
Bond Strength (Helical Coil) MW-35 @ 130°C	lbs(N)		11 (48.9)	ASTM D-2519
Bond Strength (Helical Coil) MW-35 @ 155°C	lbs(N)		9 (40.0)	ASTM D-2519
Heat distortion temperature	*F (°C)	158 (70)		
<b>Electrical properties</b>				
Dielectric strength, Short Time	V/mil(kV/mm)		>2700 (106)	ASTM D-115
Dissipation factor @ 125°C tg delta	%	2.2		ASTM D-150
Dissipation factor @ 155°C tg delta	%	1.9		ASTM D-150
Dissipation factor @ 170°C tg delta	%	2.1		ASTM D-150
Dissipation factor @ 25°C tg delta	%	0.4		ASTM D-150
Dielectric constant; 60Hz, 77°F (25°C)		2.5		ASTM D-150
<b>Thermal properties</b>				
Weight loss : 1000 hours @ 200°C	%	4.2		IEEE #57
Thermal index	°C	180		

Von Roll USA, Inc.  
Schenectady, NY 12306, USA  
www.vonroll.com

707  
NSA 311D 12-05-2008

**MATERIAL SAFETY DATA SHEET**

**VONROLL USA, INC.**

*2021*

ATTACHMENT H-6

REVISION DATE: 09/20/2006      REVISION NUMBER: 5  
 DATE OF PRINTING: 09/20/2006      SUPERSEDES MSDS DATED: 03/01/2006  
 PREPARED BY: M. J. ST. DENIS

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

MANUFACTURED BY:  
**VON ROLL USA, INC.**  
 200 VON ROLL DRIVE  
 SCHENECTADY, NY 12306  
 BUSINESS: (518) 344-7100  
 EMERGENCY: (518) 395-3310

PRODUCT ID: **707C**  
 CHEMICAL FAMILY: INSULATING VARNISH  
 CHEMICAL NAME: CATALYZED POLYESTER SOLUTION  
 FORMULA: MIXTURE  
 SYNONYMS: NONE

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

HAZARDOUS PRODUCT COMPOSITION/CAS NUMBER	APPROX. WEIGHT PERCENT	ACGIH 8 HR. TWA	ACGIH UNIT	OSHA PEL-TWA	OSHA UNIT
Vinyl Toluene 25013-15-4	30 - 60	50	PPM	100	PPM
Dicumyl Peroxide 80-43-3	1 - 5	PARTICULATES: 3	MG/M3	PARTICULATES: 15	MG/M3

**3. HAZARDS IDENTIFICATION**

EMERGENCY OVERVIEW:

Refer to other MSDS sections for detailed information.

TARGET ORGANS:

Eyes. Skin. Respiratory System. Central Nervous System. Embryo / Fetus.

EFFECTS FROM ACUTE EXPOSURE:

PRODUCT CODE:

707C 707C

*pg 37 of 78*

**INGESTION:** Harmful if swallowed. Causes vomiting, nausea, and diarrhea. May cause pulmonary edema.

**SKIN CONTACT:** Causes moderate skin irritation.

**INHALATION:** Excessive inhalation causes headache, dizziness, nausea and incoordination.

**EYE CONTACT:** May cause moderate eye irritation.

**AGGRAVATED MEDICAL CONDITIONS:** None known.

**EFFECTS OF CHRONIC EXPOSURE:** Respiratory ailments. Dermatitis. Corneal damage. Pulmonary edema. Evidence of fetotoxicity potential has been reported for vinyl toluene in a recent intraperitoneal study. Central nervous system damage.

**CARCINOGENICITY COMMENT:** This product or one of its ingredients present at 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

**CARCINOGENICITY:** This space reserved for special use.

**ROUTES OF ENTRY:** Contact. Inhalation. Ingestion.

**OTHER:** None known.

#### 4. FIRST AID MEASURES

**INGESTION:** Seek medical attention immediately.

**SKIN CONTACT:** Remove contaminated clothing and launder before reuse. Wash with soap and water. Get medical attention if irritation persists.

**INHALATION:** If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.

**EYE CONTACT:** In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

**NOTES TO PHYSICIAN:** Aspiration may cause severe lung damage. Evacuate stomach in a way which avoids aspiration.

#### 5. FIRE FIGHTING MEASURES

**FLASH POINT (F):** 115 (C): 46

**PRODUCT CODE:** 707C 707C

**FLASH POINT METHOD:** Pensky-Martens Closed Cup (PMCC)

**IGNITION TEMP (F):** Unknown (C): Unknown

**OSHA FLAMMABILITY CLASSIFICATION:** Combustible Liquid, Class II

**FLAMMABLE LIMITS IN AIR - LOWER (%):** 1.1

**FLAMMABLE LIMITS IN AIR - UPPER (%):** 5.2

**SENSITIVITY TO MECHANICAL IMPACT (Y/N):** No

**SENSITIVITY TO STATIC DISCHARGE:** Sensitivity to static discharge is expected; material has a flash point below 200 F (93 C).

**EXTINGUISHING MEDIA:** Alcohol foam. Carbon dioxide. Dry chemical. Foam. Water mist.

**FIRE FIGHTING PROCEDURES:** Vapors may form explosive mixture with air. Combustible. Wear respiratory protection if in a confined area. Cool exposed containers with water spray after extinguishing fire. Positive pressure, self-contained breathing apparatus. Polymerization may take place during a fire due to elevated temperature where closed containers could violently rupture. Evacuate area and fight fire from a safe distance. Organic peroxide. Toxic vapors are emitted in a fire condition.

**6. ACCIDENTAL RELEASE MEASURES**

**ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:**  
Wipe, scrape or soak up in an inert material and put in a container for disposal. Wear proper protective equipment as specified in the protective equipment section. Remove sources of ignition. Warn other workers of spill. Increase area ventilation.

**7. HANDLING AND STORAGE**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:**  
Use ground strap and appropriate precautions for dispensing flammable liquids. Recommended storage in original container at temperature below 30 C (85 F). Keep container closed when not in use. Avoid breathing vapors, if exposed to high vapor concentration, leave area at once. Avoid contact with skin and eyes. Use only in a well ventilated area. Caution: Combustible. Keep container closed when not in use to prevent contact with acidic, basic or oxidizing materials. During cure, vapors are given off which may be harmful. Cure only where appropriate ventilation systems exist. Keep away from food and smoking materials. Wash hands before eating and smoking.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Von Roll recommends that a competent professional, familiar with industrial engineering controls, evaluate the process to provide adequate protection for individuals involved in processes handling this material. This will involve evaluation and selection of appropriate engineering controls (such as ventilation and eyewash/safety shower) as well as appropriate personal protective equipment (such as respiratory protection, protective gloves, eye protection) for safely handling this material. The following guidelines should be considered in this process.

**ENGINEERING CONTROLS:** Exhaust ventilation. Eyewash stations. Use in a well ventilated area.

**RESPIRATORY PROTECTION:** Use in a well ventilated area. Use approved NIOSH respiratory protection if TLV exceeded, or over exposure is likely.

**GLOVES:** Neoprene gloves.

**EYE PROTECTION:** Splash Goggles.

**OTHER PERSONAL PROTECTION DATA:** Rubber apron or other chemical-resistant apron. Face shield.

**VENTILATION:** Use only in well ventilated area. Localized mechanical ventilation.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### COMPONENT INFORMATION:

HAZARDOUS PRODUCT COMPOSITION/CAS NUMBER	APPROX. WEIGHT PERCENT	BOILING POINT (F):	BOILING POINT (C):	VAPOR PRESSURE @ 20 C (mmHg):	VAPOR DENSITY (AIR=1):
Vinyl Toluene 25013-15-4	30 - 60	342	172	1.1	4.08
Dicumyl Peroxide 80-43-3	1 - 5	Decomp. @ 131	Decomp. @ 55	15 @ 38 C	9.30

### PRODUCT INFORMATION:

**BOILING POINT (F):** NOT DETERMINED (C): NOT DETERMINED

**FREEZING POINT (F):** NOT DETERMINED (C): NOT DETERMINED

**MELTING POINT (F):** NOT DETERMINED (C): NOT DETERMINED

**PHYSICAL STATE:** LIQUID

**DESCRIPTION:** AMBER

**ODOR:** HYDROCARBON

PRODUCT CODE: 707C 707C

ODOR THRESHOLD (PPM):	UNKNOWN
% VOLATILE BY WEIGHT:	NOT DETERMINED
EVAPORATION RATE (BUTYL ACETATE = 1):	NOT DETERMINED
VAPOR PRESSURE (mmHg @ 20 C):	NOT DETERMINED
VAPOR DENSITY (AIR=1):	NOT DETERMINED
SPECIFIC GRAVITY @ 25 C (WATER = 1):	1.08
ACID/ALKALINITY (MEG/G):	NOT DETERMINED
pH:	NOT DETERMINED
SOLUBILITY IN WATER DESCRIPTION:	NEGLIGIBLE
SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT):	NOT DETERMINED

## 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable.
HAZARDOUS POLYMERIZATION:	May occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide. Carbon dioxide. Alcohols. Organic acid vapors. Methane. Acetophenone. Tin fumes.
MATERIALS TO AVOID:	Avoid contact with acidic, basic or oxidizing agents. Metal salts such as aluminum chloride.
CONDITIONS TO AVOID:	Keep away from heat, sparks and flame. Avoid temperatures greater than 100 F.

## 11. TOXICOLOGICAL INFORMATION

### COMPONENT INFORMATION:

Vinyl Toluene 25013-15-4

ACUTE ORAL LD50 (MG/KG):

ACUTE DERMAL LD50 (MG/KG):

ACUTE INHALATION:

OTHER:

2,255 (RAT)

>4,500 (RABBIT)

LC50: 3,020 MG / M3 / 4H (MOUSE)

Eye and skin irritant.

Dicumyl Peroxide 80-43-3

ACUTE ORAL LD50 (MG/KG):

ACUTE DERMAL LD50 (MG/KG):

ACUTE INHALATION:

4,100 (RAT)

NOT DETERMINED

LC50: >224 MG / M3 (RAT)

PRODUCT CODE:

707C 707C

OTHER:

Eye and skin irritant.

ATTACHMENT H-6

**12. ECOLOGICAL INFORMATION**

ECOTOXICOLOGICAL INFORMATION: No data at this time.  
CHEMICAL FATE INFORMATION: No data at this time.  
PERSISTENCE: Not determined.  
APPRAISAL: Not determined.  
MOBILITY: Not determined.

**13. DISPOSAL CONSIDERATIONS**

DISPOSAL OF WASTE METHOD: Disposal should be made in accordance with federal, state and local regulations.  
EPA HAZARDOUS WASTE DISPOSAL CODE: D001, RQ = 100 lb / 45.4 kg.

**14. TRANSPORT INFORMATION**

DOT SHIPPING NAME: RESIN SOLUTION  
DOT HAZARD CLASS: 3  
DOT PACKING GROUP: PG III  
DOT LABEL(S): FLAMMABLE LIQUID  
UN/NA NUMBER: UN1866  
PLACARDS: FLAMMABLE LIQUID  
ICAO/IATA: 3 , III  
MARINE POLLUTANT: NONE  
NMFC CLASSIFICATION: CLASS 55

**15. REGULATORY INFORMATION**

HAZARD RATING SYSTEMS

NFPA RATING: HEALTH 2 , FLAMMABILITY 2 , INSTABILITY 2

PRODUCT CODE: 707C 707C

**HMS CLASSIFICATION:**

HEALTH \*2 , FLAMMABILITY 2 , PHYSICAL HAZARD 2

**VOC EXCLUDING H2O & EXEMPTED VOC (LB/GL):**

3.0 lb VOC/gal by ASTM 2369-81 ( 1g, 1 hr @ 110C)  
2.45 lb VOC/gal by ASTM 6053 (2g, 1 hr @ 150C)

**COUNTRY REGISTRATION**

**TSCA INVENTORY STATUS:**

The ingredients of this product are either listed on the TSCA inventory or are not subject to the notification requirements (exempt).

**CANADIAN INVENTORY:**

The ingredients of this product are listed on the Domestic Substance List, Non-Domestic Substance List or are exempt.

**EINECS:**

This product, and all its components, complies with EINECS.

**REGULATORY INFORMATION: CA/MA/NJ/PA RIGHT-TO-KNOW**

HAZARDOUS PRODUCT COMPOSITION/CAS NUMBER	APPROX. WEIGHT PERCENT	CALIFORNIA PROPOSITION 65	MASSACHUSETTS RIGHT-TO-KNOW	NEW JERSEY RIGHT-TO-KNOW	PENNSYLVANIA RIGHT-TO-KNOW
Vinyl Toluene 25013-15-4	30 - 60	NOT LISTED	YES	YES	YES
Dicumyl Peroxide 80-43-3	1 - 5	NOT LISTED	NOT LISTED	YES	NOT LISTED

**SARA 302 EXTREMELY HAZARDOUS SUBSTANCES LIST:**

No components of this product are listed as extremely hazardous substances in 40 CFR Part 355 and are present at levels which could require reporting and emergency planning.

**SARA (311, 312) HAZARD CLASS:**

ACUTE HEALTH HAZARD  
CHRONIC HEALTH HAZARD  
FIRE HAZARD

**SARA 313 CHEMICALS:**

This product contains toxic chemical(s) listed below which is(are) subject to the reporting requirements of Section 313 of Title III of SARA and 40 CFR Part 372.

NONE - This product does not contain chemicals at levels with require reporting under the statue.

**WHMIS (CANADA):**

**WHMIS HAZARD CLASS:**

B3 COMBUSTIBLE LIQUIDS  
C OXIDIZING MATERIALS  
D2B TOXIC MATERIALS

PRODUCT CODE: 707C 707C

WHMIS TRADE SECRET:

NONE

**16. OTHER INFORMATION**

COMPANY DISCLAIMER:

These data are offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is made. The recommended handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use.

ABBREVIATIONS:

EST = ESTIMATED  
NA = NOT APPLICABLE

NEGL. = NEGLIGIBLE  
UNKN = UNKNOWN

ADDITIONAL INFORMATION:

NONE

# Resin

Permafil® 74041 **DIPVARNISH 9S**

- ▶ High performance epoxy resin
- ▶ High thixotropic index; good penetration and retention
- ▶ Excellent chemical resistance; ideal for harsh environments
- ▶ High film build, single process
- ▶ Excellent bridging and gap filling characteristics
- ▶ Excellent bond strength
- ▶ UL system recognition up to 200°C
- ▶ High flash point; used in VPI or dip tank applications
- ▶ Low Volatility/Reduced Odor; reduces OSHA and EPA concerns

	Value	Test norm
<b>Physical properties</b>		
Viscosity (Brookfield) 77°F (25°C) 2.5 rpm	cps	4000-8000
<b>Volatiles content</b>	lbs/gal. (kg)	1.1 (0.50) ASTM D-6053
Flash point		>210°F (99°C) Pensky Martins Closed Cup
Viscosity (Brookfield) 77°F (25°C) 20 rpm	cps	2000-3000
Thixotropic Index		3-4
Specific Gravity 77°F(25°C)		1.11
Film build on steel (avg.)	mils (mm)	3.5 (0.09)
Gel time (Sunshine) @ 150°C	minutes	9-13
<b>Weight</b>		
Total weight	lbs/gal. (kg)	9.2 (4.2)
<b>Mechanical properties</b>		
Bond Strength (Helical Coil) MW-35 @ 25°C	lbs(N)	42 (186) ASTM D-2519
Bond Strength (Helical Coil) MW-35 @ 155°C	lbs(N)	7 (31) ASTM D-2519
Bond Strength (Helical Coil) MW-35 @ 180°C	lbs(N)	5 (22) ASTM D-2519
Bond Strength (Helical Coil) MW-35 @ 130°C	lbs(N)	10 (44) ASTM D-2519
<b>Electrical properties</b>		
Dissipation factor @ 25°C tan delta	%	.28 ASTM D-150
Dielectric strength, Short Time	V/mil(kV/m)	>3000 (121) ASTM D-115

**General description**

Permafil® 74041 is an extremely versatile, single component catalyzed epoxy resin for use in electric motor insulation systems up to 8kV or as an over dip for environmental protection. Its stable nature, good film formation, and ease of use, along with its good electrical properties, make it an excellent choice for many different applications.

**Application**

Permafil® 74041 is very resistant to most chemicals and has very low moisture absorption. It is widely used in both OEM and motor repair facilities where its properties make it ideal for marine, chemical, paper mill and hermetic applications. Its thixotropic nature results in an excellent retention in the coil as well as an average .003" to .004" build on the surface of the device. Although normally used in VPI process equipment, it is stable under normal conditions at room temperature and can be used in standard dip tank equipment. 74041 epoxy resin is often used in conjunction with our Mica Mat ®77986 mica tape in systems for medium voltage motors up to 7.2kV design.

**Processing**

Permafil® 74041 resin can be used in conventional or automated dip and bake process and in VI or VPI equipment. For suggested cycle times and process specifics, please contact Von Roll Isola USA, Inc.

Suggested Cure Cycle: 4-5 hours at 320°F (160°C). Chemical resistance can be improved by longer cure times.

(These times apply to small units. For larger equipment, the time for the part to reach the desired curing temperature should be added to these suggested cure times.)

**Storage Conditions**

Permafil® 74041 resin can be expected to stay within its specified gel time limits when stored for up to 12 months at 77°F (25°C). In normal use, shelf life is indefinite with adequate addition of fresh material. For process purposes in VPI equipment, the suggested storage temperature is 68°F (20°C).

### Order Data

Permafil® 74041 resin is available pre-catalyzed in 55-gallon drums or uncatalyzed in 5 and 55-gallon containers. This product is available from Von Roll USA, Inc. or from authorized Von Roll distributors. For the name of your distributor or for more information on this product, contact our Customer Service department, (518) 344-7100.

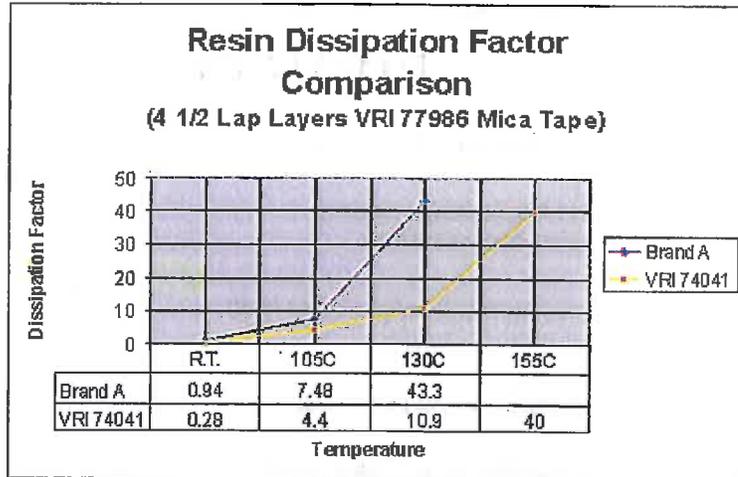
### Standards

The properties shown in this data sheet are typical values only, and should not be used as a basis for preparing specifications. Contact our Customer Service department, (518) 344-7100 for assistance in preparation of specifications for your specific system application.

### Health and safety

Material Safety Data Sheets defining the known hazards and describing safety precautions appropriate for this product are available upon request from Von Roll USA, Inc., 200 Von Roll Drive, Schenectady, New York 12306 (518) 344-7100. Similar information sheets for solvents and other chemicals used with this product may be obtained from the appropriate supplier and used accordingly.

### Electrical Characteristics



### Average helical coil bond strength after 168 hour immersion

R.T.	155°C	R.T.	155°C	R.T.	155°C	R.T.	155°C
Control		20% Sodium Sulfate		30% Hydrochloric Acid		20% Potassium Chloride	
63.7	7.6	29.7	7.6	55	8.5	35.9	9.1
Stock Acidic		White Liquor		Black Liquor		Green Liquor	
30.6	6.8	31.7	6.8	43.3	7.8	29.9	6
30% Sulfuric Acid		20% Ammonium Nitrate		30% Ammonium Sulfate		10% Sodium Chloride	
37.3	7.4	69.8	7.3	62.6	7.5	52.3	6.3
20% Muriate of Potash		6% Boric Acid		15% Potassium Sulfate			
34.7	8	42.9	7.4	46.1	7.6		

### Specifications

The properties shown in this data sheet are typical values only, and should not be used as a basis for preparing specifications. Contact our Customer Service department, (518) 344-7100 for assistance in preparation of specifications for your specific system application.

The product properties set forth in this data sheet are based on the results of testing of typical material produced by the affiliated companies of Von Roll Holding Ltd. (underneath referred as Von Roll). Some variation in product properties is typical. Comments or suggestions relating to any subject other than product properties are offered only to call the end-user's or other person's attention to considerations which may be relevant in the independent determination of the use and/or manner of use of product. Von Roll does not claim or warrant that the use of its product will have the results described in this data sheet or that the information provided is complete, accurate or useful. The user should test the product to determine its properties and its suitability for the intended use. Von Roll expressly disclaims any liability for any damage, harm, injury, cost or expense to any person resulting directly or indirectly from that person's reliance on any information contained in this data sheet. Nothing contained in this data sheet constitutes representation or warranty as to any matter whatsoever. Von Roll makes no warranties whatsoever in this data sheet, expressed or implied, including any implied warranty or fitness for a particular use or purpose. Von Roll shall in no event be liable for incidental, exemplary, punitive or consequential damages.



# TECHNICAL DATA SHEET

**JOHN C. DOLPH COMPANY**

 P.O. Box 267  
 320 New Road  
 Monmouth Junction, NJ  
 08852

 Ph: (732) 329-2333  
 Fax: (732) 329-1143  
 info@dolphs.com  
 www.dolphs.com

## SYNTHITE® ER-41

### RED AIR DRYING VARNISH 65

#### PRODUCT DESCRIPTION

ER-41 is a high temperature; fast cure, air dry, polyurethane varnish, and is an excellent insulator coating for all electrical and electronic parts. SYNTHITE® ER-41 is also available in aerosol as DOLPH - SPRAY® ER-41.

#### FEATURES & BENEFITS

- Fast drying
- Ease of Application
- High temperature rating
- Excellent chemical resistance
- UL recognized systems
- Excellent hiding power for rebuilding and manufacturing applications
- Oil and moisture resistant
- Superior abrasion resistance
- Excellent adhesion

#### TYPICAL APPLICATIONS

- Field Coils
- Control Coils
- Motor Frames
- Switch Bases
- Molded Bakelite
- Electrical Connectors
- Collector Rings
- Fuse Tubes
- Solenoid Coils
- Controller Shafts
- Printed Circuit Boards
- Commutator Ends
- Porcelain
- Soldered Joints
- Finger Blocks
- Oil reservoir interior
- Bussbars
- Stator Coil End Turns

#### TYPICAL PROPERTIES

##### Physical

Color / Appearance	Red
Density @ 77°F (25°C), Lbs/gal	7.9 – 9.0
Viscosity @ 77°F (25°C) Brookfield Viscometer cps	200 – 350
Flash point	81°F (27°C)
Cure Time @ 77°F (25°C) on Strip, min.	Set to Touch 10 Tack Free 30
Film Build, mils/side, ASTM D-115	1.5 – 2.5
Thinner (Solvent)	T-200X
VOC Content, ASTM D 6053, lbs/gal	4.4
VOC-aerosol (calculated)	47%

All statements, technical information and recommendations related to Sellers' products are based on information believed to be reliable, but the accuracy or completeness thereof is not guaranteed. Before using the product, the user should determine the suitability of the product for its intended use. The user assumes all risks and liabilities whatsoever in connection with such use. The statements contained herein are made in lieu of all warranties, expressed or implied. Seller shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use or inability to use its products. The sole liability of John C. Dolph Co., Inc. for any claims arising out of the manufacture, use or sale of its products shall be for the buyer's purchase price.

**Electrical**

Dielectric Strength, ASTM D 115, volts/mil	Dry Wet	1,800 1,200
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**Chemical Resistance**

Water	Excellent
Acid (10% Sulfuric Acid)	Excellent
Alkali (1% Sodium Hydroxide)	Excellent
Salt Water	Excellent
Oil, ASTM D-115	Passed
Corrosive Effect on Copper	None

**Thermal Classifications (UL-1446)**

Twisted Pair	MW - 28	130°F
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**APPLICATION GUIDELINES**

Stir the ER-41 to mix the pigment because there may have been some settling. Apply by brushing, dipping or spraying. ER-41 is used as supplied in many applications or may be thinned as required with T-200X. For spraying applications, it is usual to thin 20 - 25%.

The film thickness should be kept to no more than 2.0 mils per side per application. This allows for complete solvent release and proper cure. ER-41 will air dry so that it can be handled in 30 minutes. For optimum chemical and abrasion resistance, allow to air dry for at least 24 hours.

**SPECIAL PRECAUTIONS**

When ER-41 is applied by spray methods, care should be taken to keep the spray area clean. Filters and other waste from the area should be soaked in water and disposed of in safety containers.

**STORAGE AND SHELF LIFE**

Store in a cool (65-75°F, 18-24°C) dry place away from direct sunlight.

Shelf Life (Bulk) - 1 year @ 70° F(21° C).

Shelf Life (Spray) - 18 months @ 70°F (21°C).

**SAFETY AND ENVIRONMENT**

See Material Safety Data Sheet

AUTHORIZED DISTRIBUTOR
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# MATERIAL SAFETY DATA SHEET

## John C Dolph (a VonRoll Company)

SYNTHITE®

ER-41

Red, Air-Drying Varnish

**SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Manufacturer Name: John C Dolph (a Von Roll Company)  
 Address: 320 New Road, Monmouth Junction, New Jersey 08852  
 Business Phone: 732-329-2333  
 Business Fax: 732-329-1143  
 CHEMTREC: For transportation emergencies 703-527-3887 (US call 800-424-9300)  
 24-Hour Emergency: 518-395-3310  
 Manufacturer MSDS Creation Date: 07/2004  
 Manufacturer MSDS Revision Date: 09/2010

**SECTION 2: COMPOSITION, INFORMATION ON INGREDIENTS**

Chemical Name	CAS#	% Weight	OSHA PEL	ACGIH TLV
Xylene	1330-20-7	30-50	100 ppm (TWA)	100 ppm (TWA) 150 ppm (STEL)
Ethyl benzene	100-41-4	7-15	100 ppm (TWA)	100 ppm (TWA) 125 ppm (STEL)

**SECTION 3: HAZARDS IDENTIFICATION**

Emergency Overview:

Flammable. Irritant.

**Applies to All Ingredients:**

Route of Exposure:

Eyes, Skin, Inhalation, and Ingestion.

Potential Health Effects:

Eye Contact:

Can cause severe irritation, redness, tearing.

Skin Contact:

Can cause irritation. Prolonged and repeated exposures can cause defatting and drying.

Skin Absorption:

Harmful if absorbed through the skin.

Inhalation:

Inhalation of vapors or aerosol can cause nasal and respiratory tract irritation. High concentrations may result in severe irritation, liver and kidney damage. Symptoms of exposure include headaches, dizziness, drowsiness and other central nervous system effects.

Ingestion:

May be harmful if ingested in large amounts. Aspiration of material into lungs can cause lung inflammation and/or damage.

**Chronic Health Effects:**

Chronic exposure may cause damage to the central nervous system and may result in permanent brain damage. Symptoms include loss of memory, loss of judgment, and loss of coordination. Prolonged or repeated exposure may cause liver and kidney damage. Female workers over-exposed to xylene experienced menstrual disorders and complications with pregnancy.

**Target Organs:**

Liver, Kidney, CNS, eyes, skin, Respiratory System, and digestive tract

**SECTION 4: FIRST AID MEASURES****Eye Contact:**

Immediately flush eyes with plenty of water for at least 20 minutes. Assure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention if irritation persists, or symptoms of overexposure become apparent.

**Skin Contact:**

Immediately wash skin with plenty of water and soap for at least 20 minutes, while removing contaminated clothing and shoes. Get medical attention especially if irritation develops, persists, or symptoms of overexposure become apparent.

**Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Keep warm. Get immediate medical attention.

**Ingestion:**

If swallowed, call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting unless instructed by medical personnel. Get medical attention.

**SECTION 5: FIRE FIGHTING MEASURES****Fire:**

Flammable liquid. Closed containers may rupture when exposed to extreme heat. Air oxidation of this product may cause it to spontaneously combust. To avoid spontaneous combustion, prevent residue build up and soak soiled rags, spray booth filter and overspray in a closed water filled metal container. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, Weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death.

**Explosion:**

Vapors can form an explosive mixture with air. Vapor can travel to a source of ignition such as a spark or flame and flash back.

**Flash Point:**

81°F (27°C)

**Upper Flammable or Explosive Limit:**

7% for Xylene

**Lower Flammable or Explosive Limit:**

1% for Xylene

**Auto Ignition Temperature:**

Not Established

**Extinguishing Media**

In the event of a fire involving this material, alone or in combination with other materials, use dry chemicals, carbon dioxide, alcohol foam extinguishing media or any class B extinguishing agent.

**Hazardous Combustion Byproducts:**

Oxides of carbon and oxides of nitrogen, fumes and smoke.

**Fire Fighting Instructions:**

Evacuate area and fight fire from a safe distance. Containers can build up pressure if exposed to heat (fire). Use water spray to cool fire-exposed containers. DO NOT extinguish a fire resulting from the flow of this flammable liquid until the flow of liquid is effectively shut off. Explosive vapor-air mixture could form after the initial fire is extinguished. Use water spray to disperse vapors if a spill or leak has not ignited. Water runoff can cause environmental damage. Dike and collect water used to fight fire. See Section 13 for disposal considerations.

**Protective Equipment:**

Wear self-contained breathing apparatus pressure-demand, NIOSH (approved or equivalent) and full protective gear.

**NFPA**

Health: 2

Flammability: 3

Instability: 0

Other: NONE

**SECTION 6: ACCIDENTIAL RELEASE MEASURES****Spill Cleanup Measures:**

Remove all sources of ignition. Absorb spill with dry inert material (e.g., dry sand or earth), then place in a chemical waste container. Clean up spills immediately observing precautions in the protective equipment section.

**Environmental Precautions:**

Contain liquid to prevent contamination of soil, surface water or ground water. Avoid runoff into storm sewers and ditches, which lead to waterways. Do not flush to sewer.

**Spill/Release Reporting:**

Immediately notify authorities of any reportable spill as may be required pursuant to regulations. See Section 15 for applicable CERCLA reportable quantities.

**SECTION 7: HANDLING and STORAGE****Handling:**

This product should be handled only by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals, who should take into account the fire, health and chemical hazard data.

Use with adequate ventilation. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment.

"Empty" containers retain product residue (liquid and/or vapor) and can be dangerous.

Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Containers may explode and cause injury or death. Empty drums or containers should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

**Storage:**

Store in a cool, dry, well ventilated area away from sources of heat and incompatible substances. Keep container tightly closed when not in use. Store at temperatures below 80°F (27°C). Consult manufacturer for shelf life.

**Hygiene Practices**

Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist.

**SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION****Engineering Controls:**

Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended and or regulated exposure limits. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

**Skin Protection Description:**

Wear suitable protective clothing to prevent contact with skin.

**Hand Protection Description:**

Wear appropriate protective gloves such as neoprene or viton. Consult glove manufacturers for glove permeability data.

**Eye/Face Protection:**

Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

**Protective Clothing/Body Protection:**

If splashing is likely, wear impervious clothing and boots to prevent repeated or prolonged skin contact. Consult your supplier of personal protective equipment for additional instructions on proper usage.

**Respiratory Protection:**

A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited to airborne concentrations that are typically within 10 times the exposure limit. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirators use.

**Other Protective:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****Physical State/Appearance:**

Liquid

**Color:**

Red

**Odor:**

Aromatic

**pH:**

No data.

**Decomposition Temperature:**

No data.

**Vapor Pressure:**

No data.

**Vapor Density:**

No data.

**Boiling Point:**

No data.  
 Freezing Point:  
 No data.  
 Solubility in Water:  
 Negligible  
 Specific Gravity:  
 0.95-1.08  
 Percent Volatile:  
 40-65%  
 Viscosity:  
 200-350 cps  
 Molecular Weight:  
 Mixture  
 Flashpoint:  
 81°F (27°C)  
 Auto Ignition Temp:  
 Not Established  
 Upper Flammable Explosive Limit:  
 7% for Xylene  
 Lower Flammable Explosive Limit:  
 1% for Xylene

#### SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:  
 Stable at normal temperatures and storage conditions.  
 Conditions to Avoid:  
 Flames, heat, sparks and high temperatures and pressures. Oxidizing conditions.  
 Storage conditions above 80°F.  
 Incompatibilities with Other Materials:  
 Oxidizers such as peroxides, chlorates, and permanganates  
 Hazardous Polymerization:  
 Will not occur.  
 Hazardous Decomposition Products:  
 Carbon monoxide, carbon dioxide and hydrocarbons

#### SECTION 11: TOXICOLOGICAL INFORMATION

**Ethyl benzene:**  
 Eye Effect:  
 Eye - rabbit: 500 mg; severe irritation (RTECS)  
 Skin Effects:  
 No data reported in the cited references as of the revision date.  
 Ingestion Effects:  
 Oral - rat LD<sub>50</sub>: 3500 mg/kg (RTECS)  
 Inhalation Effects:  
 Inhalation - rat LCLo: 4000 ppm/4H (RTECS)  
 Inhalation - human TCLo: 100 ppm/8H (RTECS)  
 Carcinogenicity:  
 IARC-2B Carcinogen - Possibly Carcinogenic to Humans  
 Mutagenicity:  
 Human mutation data reported (RTECS)  
 Reproductive Toxicity:  
 Reproductive effects (RTECS)

**Irritation:**

Skin - rabbit: 15 mg/24H; open; mild irritation (RTECS)

**Other Toxicological Information:**

Intraperitoneal - mouse LD<sub>50</sub>: 2624 uL/kg

**Xylene:****Eye Effect:**

Eye - rabbit: 5 mg/24H; severe irritation

Eye - rabbit: 87 mg; mild irritation (RTECS)

**Skin Effects:**

Skin - rabbit LD<sub>50</sub>: >1700 mg/kg data for xylene (RTECS)

**Ingestion Effects:**

Oral - rat LD<sub>50</sub>: 4300 mg/kg (RTECS)

**Inhalation Effects:**

Inhalation - rat LC<sub>50</sub>: 5000 ppm/4H (RTECS)

Inhalation - human TCLo: 200 ppm (RTECS)

**Carcinogenicity:**

IARC-3 Carcinogen - Unclassifiable as to Carcinogenicity in Humans

**Mutagenicity:**

Mutation data reported (Sax)

**Reproductive Toxicity:**

Reproductive effects (RTECS)

**Irritation:**

Skin - rabbit: 100%; moderate irritation

**Other Toxicological Information:**

Intraperitoneal - rat LD<sub>50</sub>: 2459 mg/kg

Subcutaneous - rat LD<sub>50</sub>: 1700 mg/kg

**Additives:****Acute Health Effects:**

The primary hazard of these components is skin and eye irritation.

**Carcinogenicity:**

Contains trace amounts (less than 0.1% by weight) cobalt, which is considered a group 2B possible human carcinogen.

Contains approximately 3.0% methyl ethyl ketoxime, which is considered to be carcinogenic by RTECS criteria (rat, liver tumors).

**SECTION 12: ECOLOGICAL INFORMATION****Ecotoxicity:**

Xylene: LC<sub>50</sub> (fathead minnow), 42 mg / l / 96 hr; 46 mg / l / 1 hr at 18-22 deg. C, in a static bioassay, LD<sub>50</sub> (goldfish), 13 mg / l / 24 hr, LC<sub>50</sub> (rainbow trout), 13.5 mg / l / 96 hr

**SECTION 13: DISPOSAL CONSIDERATIONS****Waste Disposal:**

Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines, by a licensed disposal company.

**SECTION 14: TRANSPORT INFORMATION**

DOT Shipping Name

Paint

DOT UN Number

UN1263  
 DOT Hazard Class: 3  
 DOT Packing Group: III

### SECTION 15: REGULATORY INFORMATION

#### All Components:

TSCA 8(b): Inventory Status  
 Listed or Exempt

#### Ethyl benzene:

Section 302 Extremely Hazardous Substances (RQ): 1000 pounds (454 kg)

Section 312 Hazard Category:

Acute: Yes  
 Chronic: Yes  
 Fire: Yes

State:

Ethyl benzene can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, and Massachusetts.

#### Xylene:

Section 302 Extremely Hazardous Substances (RQ):  
 100 pounds (45.4 kg)

Section 312 Hazard Category:

Acute: Yes  
 Chronic: Yes  
 Fire: Yes

State:

Xylene can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, and Massachusetts.

### SECTION 16: ADDITIONAL INFORMATION

#### HMIS

Health: \*2  
 Fire Hazard: 3  
 Physical Hazard: 0

#### Disclaimer:

While John C Dolph (a Von Roll Company) believes the data set forth herein are accurate as of the date hereof, it is furnished without warranty of any kind and specially disclaims all liability for reliance on the information provided. The data is furnished solely for your consideration, investigation and verification.



**Attachment J  
EMISSION POINTS DATA SUMMARY SHEET**

**Table 1: Emissions Data**

Emission Point ID No. (Must match Emission Units Table & Plot Plan)	Emission Point Type <sup>1</sup>	Emission Unit Vented Through This Point (Must match Emission Units Table & Plot Plan)		Air Pollution Control Device (Must match Emission Units Table & Plot Plan)		Vent Time for Emission Unit (chemical processes only)		All Regulated Pollutants - Chemical Name/CAS <sup>3</sup> (Speciate VOCs & HAPs)	Maximum Potential Uncontrolled Emissions <sup>4</sup>		Maximum Potential Controlled Emissions <sup>5</sup>		Emission Form or Phase (At exit conditions, Solid, Liquid or Gas/Vapor)	Est. Method Used <sup>6</sup>	Emission Concentration <sup>7</sup> (ppmv or mg/m <sup>3</sup> )
		ID No.	Source	ID No.	Device Type	Short Term <sup>2</sup>	Max (hr/yr)		lb/hr	ton/yr	lb/hr	ton/yr			
6E	FAN	65	PAINT BOOTH	3C	PAINT FILTER	N/A	N/A	VOCs PM PM10 HAPS	20 PPH 20 PPH 10 24	1.64 1.875 0.9 0.12	2.0 20 0.9 2.4	1.64 1.875 0.9 0.12	gas solid solid gas	MB MB MB MB	—
8E	AMBIENT	85	VPI	—	—	N/A	N/A	VOCs	1	3.675	1	3.675	gas	MB	—
9E	AMBIENT	95	DIP TANK	—	—	N/A	N/A	VOCs	1	1.2	1	1.2	gas	MB	—

The EMISSION POINTS DATA SUMMARY SHEET provides a summation of emissions by emission unit. Note that uncaptured process emission unit emissions are not typically considered to be fugitive and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET. Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions). Please complete the FUGITIVE EMISSIONS DATA SUMMARY SHEET for fugitive emission activities.

- 1 Please add descriptors such as upward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.
- 2 Indicate by "C" if venting is continuous. Otherwise, specify the average short-term venting rate with units, for intermittent venting (e.g., 15 min/hr). Indicate as many rates as needed to clarify frequency of venting (e.g., 5 min/day, 2 days/wk).
- 3 List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. LIST Acids, CO, CS<sub>2</sub>, VOCs, H<sub>2</sub>S, Inorganics, Lead, Organics, O<sub>3</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>, SO<sub>3</sub>, all applicable Greenhouse Gases (including CO<sub>2</sub> and methane), etc. DO NOT LIST H<sub>2</sub>, H<sub>2</sub>O, N<sub>2</sub>, O<sub>2</sub>, and Noble Gases.
- 4 Give maximum potential emission rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).
- 5 Give maximum potential emission rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).
- 6 Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (specify).
- 7 Provide for all pollutant emissions. Typically, the units of parts per million by volume (ppmv) are used. If the emission is a mineral acid (sulfuric, nitric, hydrochloric or phosphoric) use units of milligram per dry cubic meter (mg/m<sup>3</sup>) at standard conditions (68 °F and 29.92 inches Hg) (see 45CSR7). If the pollutant is SO<sub>2</sub>, use units of ppmv (See 45CSR10).

PG 57 + 78



**Attachment L**  
**EMISSIONS UNIT DATA SHEET**  
**GENERAL**

To be used for affected sources other than asphalt plants, foundries, incinerators, indirect heat exchangers, and quarries.

Identification Number (as assigned on *Equipment List Form*): 8S, 9S

<p>1. Name or type and model of proposed affected source:</p> <p style="text-align: center;">VPI 8' X 8' and DIP TANK 4' X 3' X 4'</p>
<p>2. On a separate sheet(s), furnish a sketch(es) of this affected source. If a modification is to be made to this source, clearly indicated the change(s). Provide a narrative description of all features of the affected source which may affect the production of air pollutants.</p>
<p>3. Name(s) and maximum amount of proposed process material(s) charged per hour:</p> <p>VPI - 20,000 lb DIP - 3,000 lb</p>
<p>4. Name(s) and maximum amount of proposed material(s) produced per hour:</p> <p>VPI - SAME DIP - SAME</p>
<p>5. Give chemical reactions, if applicable, that will be involved in the generation of air pollutants:</p> <p style="text-align: center;">N/A</p>

\* The identification number which appears here must correspond to the air pollution control device identification number appearing on the *List Form*.

6. Combustion Data (if applicable):			
(a) Type and amount in appropriate units of fuel(s) to be burned:			
N/A			
(b) Chemical analysis of proposed fuel(s), excluding coal, including maximum percent sulfur and ash:			
N/A			
(c) Theoretical combustion air requirement (ACF/unit of fuel):			
@	N/A	°F and	psia.
(d) Percent excess air:      N/A			
(e) Type and BTU/hr of burners and all other firing equipment planned to be used:			
N/A			
(f) If coal is proposed as a source of fuel, identify supplier and seams and give sizing of the coal as it will be fired:			
N/A			
(g) Proposed maximum design heat input:      N/A      × 10 <sup>6</sup> BTU/hr.			
7. Projected operating schedule:			
Hours/Day	24	Days/Week	7
		Weeks/Year	52

8. Projected amount of pollutants that would be emitted from this affected source if no control devices were used:			
@		°F and	psia
a. NO <sub>x</sub>		lb/hr	grains/ACF
b. SO <sub>2</sub>		lb/hr	grains/ACF
c. CO		lb/hr	grains/ACF
d. PM <sub>10</sub>		lb/hr	grains/ACF
e. Hydrocarbons		lb/hr	grains/ACF
f. VOCs	8S ----- 1 for VPI 9S ----- 1 for DIP	lb/hr	3.675 TPY 1.2 TPY <del>grains/ACF</del>
g. Pb		lb/hr	grains/ACF
h. Specify other(s)		lb/hr	grains/ACF
		lb/hr	grains/ACF

NOTE: (1) An Air Pollution Control Device Sheet must be completed for any air pollution device(s) used to control emissions from this affected source.

(2) Complete the Emission Points Data Sheet.

9. Proposed Monitoring, Recordkeeping, Reporting, and Testing  
 Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.

MONITORING

RECORDKEEPING

REPORTING

TESTING

**MONITORING.** PLEASE LIST AND DESCRIBE THE PROCESS PARAMETERS AND RANGES THAT ARE PROPOSED TO BE MONITORED IN ORDER TO DEMONSTRATE COMPLIANCE WITH THE OPERATION OF THIS PROCESS EQUIPMENT OPERATION/AIR POLLUTION CONTROL DEVICE.

**RECORDKEEPING.** PLEASE DESCRIBE THE PROPOSED RECORDKEEPING THAT WILL ACCOMPANY THE MONITORING.

**REPORTING.** PLEASE DESCRIBE THE PROPOSED FREQUENCY OF REPORTING OF THE RECORDKEEPING.

**TESTING.** PLEASE DESCRIBE ANY PROPOSED EMISSIONS TESTING FOR THIS PROCESS EQUIPMENT/AIR POLLUTION CONTROL DEVICE.

10. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty

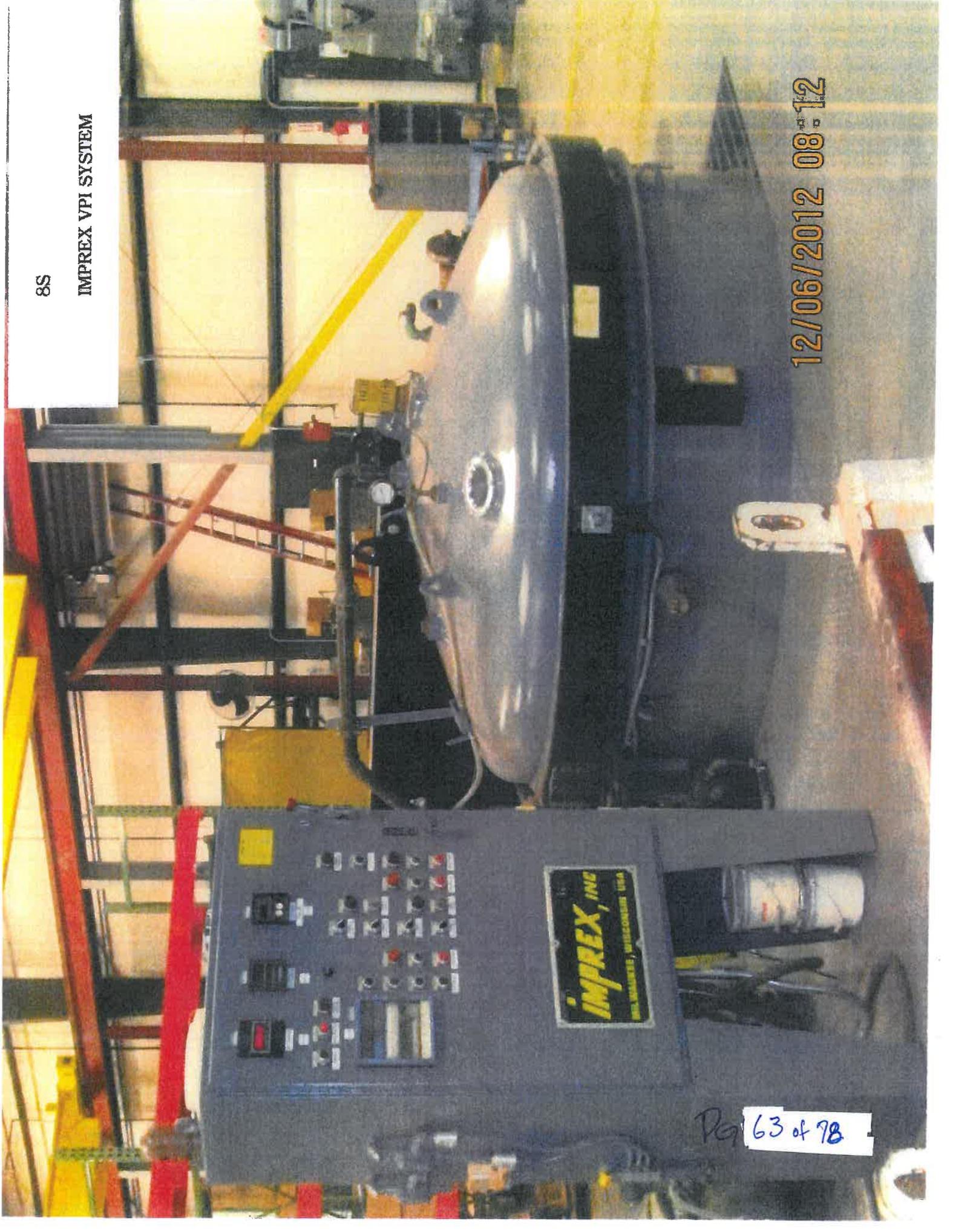
8S

IMPRES VPI SYSTEM

12/06/2012 08:12

**IMPRES, INC**  
MILWAUKEE, WISCONSIN USA

Page 63 of 98





**Attachment L  
EMISSIONS UNIT DATA SHEET  
GENERAL**

To be used for affected sources other than asphalt plants, foundries, incinerators, indirect heat exchangers, and quarries.

Identification Number (as assigned on *Equipment List Form*): 6S

1. Name or type and model of proposed affected source:  BINKS PAINT BOOTH
2. On a separate sheet(s), furnish a sketch(es) of this affected source. If a modification is to be made to this source, clearly indicated the change(s). Provide a narrative description of all features of the affected source which may affect the production of air pollutants.
3. Name(s) and maximum amount of proposed process material(s) charged per hour:  20,000 lb
4. Name(s) and maximum amount of proposed material(s) produced per hour:  20,000 lb
5. Give chemical reactions, if applicable, that will be involved in the generation of air pollutants:  N/A

\* The identification number which appears here must correspond to the air pollution control device identification number appearing on the *List Form*.

6. Combustion Data (if applicable):			
(a) Type and amount in appropriate units of fuel(s) to be burned:			
N/A			
(b) Chemical analysis of proposed fuel(s), excluding coal, including maximum percent sulfur and ash:			
N/A			
(c) Theoretical combustion air requirement (ACF/unit of fuel):			
@	N/A	°F and	psia.
(d) Percent excess air:      N/A			
(e) Type and BTU/hr of burners and all other firing equipment planned to be used:			
N/A			
(f) If coal is proposed as a source of fuel, identify supplier and seams and give sizing of the coal as it will be fired:			
N/A			
(g) Proposed maximum design heat input:      N/A      × 10 <sup>6</sup> BTU/hr.			
7. Projected operating schedule:			
Hours/Day	24	Days/Week	7
		Weeks/Year	52

8. Projected amount of pollutants that would be emitted from this affected source if no control devices were used:

@	°F and	psia		
a. NO <sub>x</sub>			lb/hr	grains/ACF
b. SO <sub>2</sub>			lb/hr	grains/ACF
c. CO			lb/hr	grains/ACF
d. PM <sub>10</sub>	10		lb/hr	0.9 TPY <del>grains/ACF</del>
e. Hydrocarbons			lb/hr	grains/ACF
f. VOCs	20		lb/hr	1.64 TPY <del>grains/ACF</del>
g. Pb			lb/hr	grains/ACF
h. Specify other(s)				
PM	20		lb/hr	1.875 TPY <del>grains/ACF</del>
TOTAL HAPS	24		lb/hr	0.12 TPY <del>grains/ACF</del>
			lb/hr	grains/ACF
			lb/hr	grains/ACF

NOTE: (1) An Air Pollution Control Device Sheet must be completed for any air pollution device(s) used to control emissions from this affected source.

(2) Complete the Emission Points Data Sheet.

9. Proposed Monitoring, Recordkeeping, Reporting, and Testing  
 Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.

MONITORING	RECORDKEEPING  Record time spent painting I.D. and record paint used and amount Record VOC emissions
------------	--

REPORTING	TESTING
-----------	---------

**MONITORING.** PLEASE LIST AND DESCRIBE THE PROCESS PARAMETERS AND RANGES THAT ARE PROPOSED TO BE MONITORED IN ORDER TO DEMONSTRATE COMPLIANCE WITH THE OPERATION OF THIS PROCESS EQUIPMENT OPERATION/AIR POLLUTION CONTROL DEVICE.

**RECORDKEEPING.** PLEASE DESCRIBE THE PROPOSED RECORDKEEPING THAT WILL ACCOMPANY THE MONITORING.

**REPORTING.** PLEASE DESCRIBE THE PROPOSED FREQUENCY OF REPORTING OF THE RECORDKEEPING.

**TESTING.** PLEASE DESCRIBE ANY PROPOSED EMISSIONS TESTING FOR THIS PROCESS EQUIPMENT/AIR POLLUTION CONTROL DEVICE.

10. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty

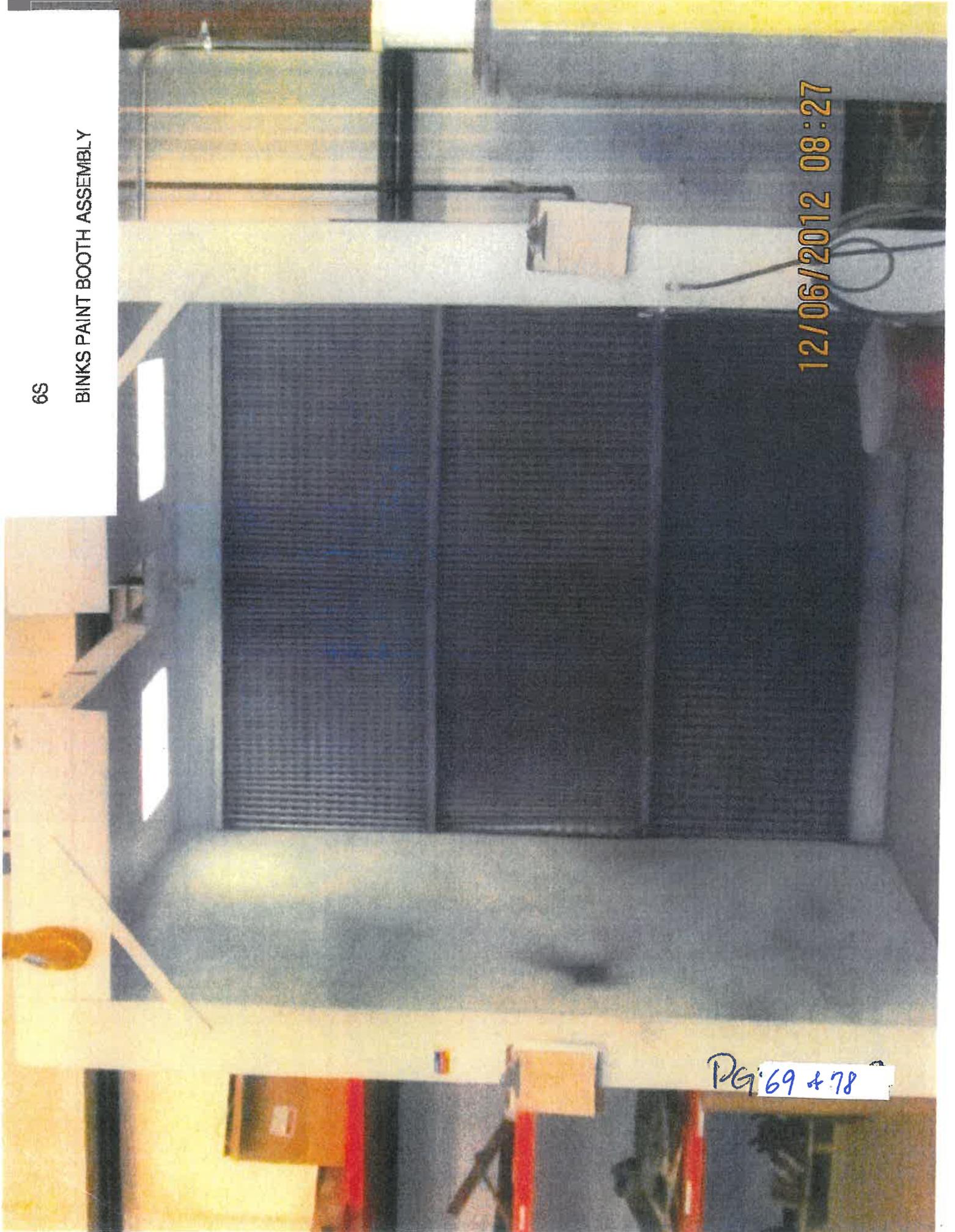
n/a

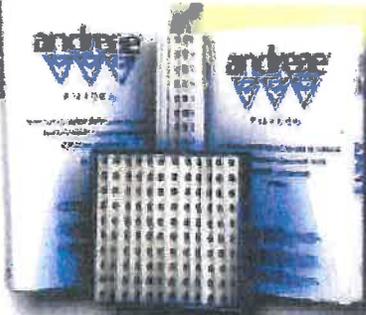
6S

BINKS PAINT BOOTH ASSEMBLY

12/06/2012 08:27

DG:69 + 78





**WORTHY OF IMITATION**

*same as in original permit*

**TECHNICAL INFORMATION**

**Filtration Efficiency** 98.2%\*  
**Holding Capacity** 4 lbs/sf (19.53kg/m2)\*  
**Recommended Air Velocity** 49-197 fpm (0.26-1.00 m/s)  
**Recommended Max Pressure Drop** 0.51 in wc (128 pa)  
*possible up to 1.03 in wc (256 pa)*

**Pressure Drop**  
 0.05 in wc (12pa) @ 100 fpm (0.50 m/s)  
 0.12 in wc (30pa) @ 150 fpm (0.75 m/s)  
 0.22 in wc (55pa) @ 200 fpm (1.00 m/s)

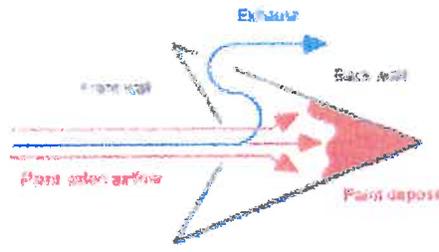
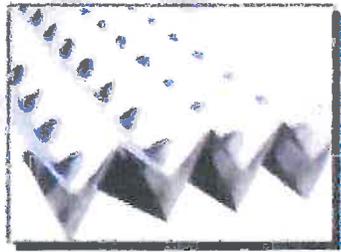


Diagram of the media separation principle as described in the Standard Filter

The front V-shaped wall of the filter prevents overspray bounce back and migration.  
 The deeper V-shape of the back wall is the paint holding pocket.  
 The filter exhaust hoses are misaligned to divert the paint laden airflow to the holding pocket while maintaining a constant flow during the loading phase.

\*As tested by the Air Filter Testing Laboratories, Inc.

PART #	COLOR	SIZE	METRICS	FILTERS/BOX	BOXES/SKID	WEIGHT/BOX
AF113	WHITE	39' 25" x 33'	1.0 x 10.0m	1	60	21 lbs (9.5kg) ±
AF213	WHITE	20' x 20'	0.6 x 0.6m	40	48	20 lbs (9.1kg) ±
AF413	WHITE	20' x 25'	0.6 x 0.8m	36	48	24 lbs (10.9kg) ±
AF813	WHITE	3' x 30'	0.9 x 9.1m	1	60	17 lbs (7.7kg) ±

\*Weight is an averaged estimate; actual weight will vary.

**FAQS**

- **What is the average filter life of an Andreae Filter?** Filter life depends on many variables including the end user. Some variables include: type of coating and amount being sprayed, transfer efficiency, and air flow. With optimum air velocity and recommended pressure drop, the Standard Andreae Filter can last 3-5 times longer than fiberglass, polyester, or expanded paper.
- **Do Andreae Filters only work on paint?** The Andreae Team range of filters are made to capture any wet solids or liquid particles contained in an air stream: high solid enamels, baked and air dried enamels, glues, oils, stains, lacquers, fiberglass, adhesives, asphalt, clear coats, tar, tallow, etc.
- **Why should I convert my spray booth to Andreae Filters?** Converting to Andreae Filters saves you money! Fewer filter changes means less disposal costs, less labor and more production time due to fewer change outs.
- **Why is a high holding capacity essential?** Media separation by media (the captured overspray is deposited outside of the airflow in the holding pockets). The larger the pocket, the better the holding capacity of the filter. The Andreae Filter has 8 deep holding pockets per linear foot (0.3m).
- **What happens if the filter is over-extended?** The accordion shape concentrates a large number of pockets and hoses per square foot (0.93m<sup>2</sup>). This principle maintains a low static pressure and high holding capacity. Over extension dramatically increases the static pressure and reduces filter life. Ideal installation is 8 stacks per foot (0.3m). Andreae Filters are equipped with an extension trailer to prevent over extension.



*Dec 70 & 78*

Date: February 15, 2016

1



**ALL SHIFTS INCLUDED** SPRAY PAINT BOOTH - STATE OF WV EMISSIONS LOG

Employee Name	A. Minutes Spent Painting		Brand, Color, Series # (Choose from list)	B. Amount of Product Used. (pint, quart, 1/2 gal or full gal(s))	C. VOC Content Lbs per Gallon. (Choose from list)	D. Emissions B x C = Lbs Released
	(Actual Painting Time Only)	Do Not Include Set Up				
1st Shift						
2nd Shift						
3rd Shift						
4th Shift						
TOTALS ▶▶	A = ( 210 ) MIN		HOURLY EMISSION= TOTAL OF COLUMN D			
▶▶▶	MIN / 60 = 3.5 HRS		DIVIDED BY 8 HOURS =			
1 Albert	120 min		Col. Gray	1-Gal	3.5401	3.5401
2 John X Smith	90 min		Red insul. ER41	1/2 Gal	4.40	2.20
3 Painting						
4 Painting						
TOTALS ▶▶	A = ( 210 ) MIN		HOURLY EMISSION= TOTAL OF COLUMN D			
▶▶▶	MIN / 60 = 3.5 HRS		DIVIDED BY 8 HOURS = 0.7175			
			POUNDS PER SHIFT 5.7401			

**PAINT BOOTH SUMMARY BY DATE - WV VOC EMISSIONS**

DATE	1ST SHIFT VOC	2ND SHIFT VOC	TOTAL FOR DAY	DATE	1ST SHIFT VOC	2ND SHIFT VOC	TOTAL FOR DAY
2/11/16	0	3.5401	3.5401	2/20/16	0	0	0
2/12/16	0	1.77	1.77	2/21/16	0	0	0
2/13/16	1.77	2.20	3.97	2/22/16	0	0	0
2/14/16	0	2.20	2.20	2/23/16	0	1.77	1.77
2/15/16	0	3.30	3.30	2/24/16	0	2.20	2.20
2/16/16	0	0	0	2/25/16	3.5401	5.3101	8.8502
2/17/16	0	0	0	2/26/16	0	3.5401	3.5401
2/18/16	0	3.30	3.30	2/27/16	0	0	0
2/19/16	0	3.54	3.54	2/28/16	0	0	0
2/10/16	0	7.94	7.94	2/29/16	0	7.51	7.51
2/11/16	55	5.74	6.29				
2/12/16	0	2.20	2.20				
2/13/16	0	2.20	2.20				
2/14/16	0	0	0				
2/15/16	0	5.74	5.74				
2/16/16	0	3.54	3.54				
2/17/16	0	8.6101	8.6101				
2/18/16	1.77	3.30	5.07				
2/19/16	0	3.5401	3.5401				

**From:** Coccari, Gene M <Gene.M.Coccari@wv.gov>  
**Sent:** Friday, October 30, 2015 4:02 PM  
**To:** dmccallister@magnetech.com  
**Subject:** RE: VPI and Vanish Info

**8S -- VPI System Permitted Limits: 0.05 PPH and 0.05 TPY**      540 gal \* 2.45 PPG = 1323 PPY or **0.6615 TPY**  
**9S -- Dip Tank Permitted Limits: 0.21 PPH and 0.22 TPY**      49 gal \* 0.8 PPG = 39.2 PPY or 0.0196 TPY

Pounds Per Hour (PPH)      Pounds Per Year (PPY)      Tons Per Year (TPY)

I propose:

8S -- VPI System Permitted Limits: 0.05 PPH and 0.05 TPY      3000 gal \* 2.45 PPG = 7300 PPY or 3.675 TPY  
 9S -- Dip Tank Permitted Limits: 0.21 PPH and 0.22 TPY      3000 gal \* 0.8 PPG = 2400 PPY or 1.2 TPY

New Total VOCs = **4.875 TPY**      This could be handled as a Class II Administrative Update. Theoretically, these amounts could be doubled even.

I propose coming down there to examine the previous application/permit to ensure that we don't need to fix anything else... Let me know. Gene

---

**From:** [dmccallister@magnetech.com](mailto:dmccallister@magnetech.com) [<mailto:DMcCallister@magnetech.com>]  
**Sent:** Friday, October 30, 2015 2:50 PM  
**To:** Coccari, Gene M  
**Subject:** RE: VPI and Vanish Info

2.45 VOC for VPI

.8 VOC for Varnish dip

**Deb McCallister**  
**Office Manager**  
**Magnetech Industrial Services, Inc.**  
 501 8<sup>th</sup> Avenue West  
 Huntington, WV 25701

304-529-3264 **phone**  
 304-529-3266 **fax**  
 304-634-9500 **cell**  
[dmccallister@magnetech.com](mailto:dmccallister@magnetech.com)

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**ATTACHMENT N-1  
Administrative Adjustment - Varnish**

Product	Other Identifier	Other	Prod Wght unit	VOC	Unit	HAP	Usage			
							Gal	VOC-LBS		
Varnish VPI	VPI	Permafil 707	8.95	lbs/gal	2.54	lbs/gal	N/A	35	89 VPI Tank Additive	
Varnish - Dip Tank	permafil	74041	9.2	lbs/gal	1.1	lbs/gal	N/A	3000	3300 Dip Tank	
Varnish	Von Roll	707C	8.95	lbs/gal	2.45	lbs/gal	N/A	3000	7350 VPI Tank	
<b>Totals</b>								<b>6035</b>	<b>10739</b>	



AIR QUALITY PERMIT NOTICE

Notice is given that Magnetech Industrial Services, Inc. has applied to the WV Department of Environmental Protection, Division of Air Quality (WVDEP-DAQ), for Class II administrative update for an electric motor repair shop. The facility is located at 501 West 8<sup>th</sup> Avenue, Huntington, Cabell County, WV 25701 at Latitude: 38.41025 and Longitude: -82.4620. The applicant estimates the increased potential to discharge the following Regulated Air Pollutants will be:

PM = 2 TPY

PM10 = 1 TPY

VOC = 7.0 TPY

Total HAPS = 0.5 TPY

Start-up of the operation is planned to begin on or about the 1<sup>st</sup> day of June, 2016. Written comments will be received by the WV Department of Environmental Protection, Division of Air Quality, 601 57<sup>th</sup> Street SE, Charleston, WV 25304, for at least 30 calendar days from the date of the publication of this notice.

Any questions regarding this permit application should be directed to the Division of Air Quality at (304) 926-0499, extension 1227, during normal business hours.

Dated this \_\_\_\_\_ day of \_\_\_\_\_

By: Magnetech Industrial Services, Inc.

Michael Rice, President

800 Nave Road SE

Massillon, OH 44646

**Attachment R  
AUTHORITY OF CORPORATION  
OR OTHER BUSINESS ENTITY (DOMESTIC OR FOREIGN)**

TO: The West Virginia Department of Environmental Protection,  
Division of Air Quality

DATE: 4/13, 2016

ATTN.: Director

Corporation's / other business entity's Federal Employer I.D. Number 35-2114582

The undersigned hereby files with the West Virginia Department of Environmental Protection, Division of Air Quality, a permit application and hereby certifies that the said name is a trade name which is used in the conduct of an incorporated business or other business entity.

Further, the corporation or the business entity certifies as follows:

(1) Michael Rice (is/are) the authorized representative(s) and in that capacity may represent the interest of the corporation or the business entity and may obligate and legally bind the corporation or the business entity.

(2) The corporation or the business entity is authorized to do business in the State of West Virginia.

(3) If the corporation or the business entity changes its authorized representative(s), the corporation or the business entity shall notify the Director of the West Virginia Department of Environmental Protection, Division of Air Quality, immediately upon such change.



\_\_\_\_\_  
President or Other Authorized Officer  
(Vice President, Secretary, Treasurer or other official in charge of a principal business function of the corporation or the business entity)

(If not the President, then the corporation or the business entity must submit certified minutes or bylaws stating legal authority of other authorized officer to bind the corporation or the business entity).

\_\_\_\_\_  
Secretary

Magnetech Industrial Services

\_\_\_\_\_  
Name of Corporation or business entity