Safety Data Sheet

Prepared according to Federal Register / vol. 77, No. 58/ Monday, March 26, 2012 / Rules and Regulations

Section 1 - Company & Product Identification

Product Name: Low VOC Epoxy Primer Part A Product Code: 1007-A (J-K)

Trade Name: **MIL-PRF-23377 Type I, Class 2 Epoxy Primer Touch-up Pen**

Manufactured by:

Spectrum Coatings Laboratories, Inc.
217 Chapman Street
Providence, RI 02905
ph:401-781-4847
fax:401-781-1075
web: spectrumcoatings.us
email: paintman97@gmail.com

Emergency Contact Information:

Daytime Information: 8:00am - 4:30pm EST
401-781-4847

24 Hour Emergency Contact:
Chemtrec - 800-424-9300
International: +1 703-527-3887
Emergency Information Only

Product filled by : Delaware Paint Company 8455 Rausch Drive Plain City, Ohio 43064 740-368-9981

Product Use: Professional Industrial and Commercial Spray Painting
Not recommended for: Commodity General Public Use

Section 2 - Hazards Identification

GHS Ratings:

Flammable liquid	2	Flash point < 23°C and initial boiling point > 35°C (95°F)
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation
Eye corrosive	2A	Eye irritant: Subcategory 2A, Reversible in 21 days
Skin sensitizer	1	Skin sensitizer
Carcinogen	1B	Presumed Human Carcinogen, Based on demonstrated animal carcinogenicity
Reproductive toxin	2	Human or animal evidence possibly with other information
Organ toxin repeated exposure	2	Presumed to be harmful to human health- Animal studies with significant toxic effects relevant to humans at generally moderate exposure (guidance)- Human evidence in exceptional cases
Aspiration hazard	1	Aspiration Toxicity Category 1: Known (regarded)- human evidence - hydrocarbons with kinematic viscosity ? 20.5 mm2/s at 40° C.

GHS Hazards

H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure

GHS Precautions

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood

P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilating/lighting/all motorized electrical equipment being used in the area where this material is being handled
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash all exposed areas thoroughly after handling
P272	Contaminated work clothing should not be allowed out of the workplace
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P314	Get Medical advice/attention if you feel unwell
P321	Specific treatment (see Section 4 and 11 of SDS)
P331	Do NOT induce vomiting
P362	Take off contaminated clothing and wash before reuse
P363	Wash contaminated clothing before reuse
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352	IF ON SKIN: Wash with soap and water
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention
P332+P313	If skin irritation occurs: Get medical advice/attention
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
P337+P313	Get medical advice/attention
P370+P378	In case of fire: Use CO2, Foam, or Chemical Extinguisher for extinction
P405	Store locked up
P403+P235	Store in a well ventilated place. Keep cool
P501	Dispose of contents/container to suitable waste stream in accordance with local, regional, national, and international regulations.

Signal Word: Danger

Section 3 - Composition/information on ingredients

Chemical Name	CAS number	Weight Concentration %
Bisphenol-A Epichlorohydrin	25068-38-6	30.00% - 40.00%
Strontium Chromate	7789-06-2	10.00% - 20.00%
Calcium Magnesium Silicate Hydrate-Non-Asbestos	14807-96-6	10.00% - 20.00%
Toluol	108-88-3	5.00% - 10.00%
Xylol	1330-20-7	5.00% - 10.00%
Amorphous Silica	63231-67-4	5.00% - 10.00%
Titanium Dioxide	13463-67-7	1.00% - 5.00%
Amorphous Silica	61790-53-2	1.00% - 5.00%
4-Methyl, 2-Pentanone	108-10-1	1.00% - 5.00%

Propylene Glycol Monomethyl Ether Acetate	108-65-6	1.00% - 5.00%
Urea P/W Formaldehyde, Isobutylated	68002-18-6	1.00% - 5.00%
Barium chromate	10294-40-3	0.10% - 1.00%

Section 4 - First aid measures

4.1. Description of first aid measures
First-aid measures general: If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.
IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. If pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.
IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes . If irritation develops or persists, get medical attention.
IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries:
Symptoms/injuries after inhalation:
Symptoms/injuries after skin contact:
Symptoms/injuries after eye contact:
Symptoms/injuries after ingestion:
Chronic symptoms:

Section 5 - Firefighting measures

Flash Point: 7 C (45 F)
LEL: 1.00 UEL: 8.00

5.1. Extinguishing media
Suitable extinguishing media: Carbon dioxide, Carbon Dioxide, Foam

5.2. Special hazards arising from the substance or mixture
Fire hazard:
Explosion hazard:
Reactivity:

5.3. Advice for firefighters
Firefighting instructions:
Protection during firefighting:

Section 6 - Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
General measures:Evacuate area. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8). Ventilate area. Keep upwind.

6.1.1. For non-emergency personnel
Protective equipment: Wear Protective equipment as described in Section 8.
Emergency procedures: Evacuate unnecessary personnel.
6.1.2. For emergency responders
Protective equipment: Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions
Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up
For containment:
Methods for cleaning up:

Section 7 - Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling:

7.2. Conditions for safe storage, including any incompatiblities
Storage Conditions:
Storage Temperature:

Section 8 - Exposure controls/personal protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Bisphenol-A Epichlorohydrin 25068-38-6	OELs not established	OELs not established	Not Established
Strontium Chromate 7789-06-2	OELs not established	TLV 0.0005 mg/m3 - TWA	Not Established
Calcium Magnesium Silicate Hydrate-Non-Asbestos 14807-96-6	PEL - 20 mppcf - TWA (if 1% Quartz or more, use Quartz limit) VPEL- 2 mg/m3 - TWA (respirable dust)	TLV 2 mg/m3 - TWA (respirable fraction)	Not Established
Toluol 108-88-3	PEL 200ppm - TWA PEL 300ppm - Ceiling VPEL 100ppm - TWA VPEL 150ppm - STEL	TLV 20ppm - TWA	Not Established
Xylol 1330-20-7	PEL 100ppm - TWA VPEL 100ppm - TWA VPEL 150ppm - STEL	TLV 100ppm - TWA TLV 150ppm - STEL	46ppm TWA
Amorphous Silica 63231-67-4	OELs not established	OELs not established	Not Established
Titanium Dioxide 13463-67-7	PEL 15mg/m3 - TWA (total dust)	TLV 10mg/m3 - TWA (total dust)	Not Established
Amorphous Silica 61790-53-2	PEL 20 mppcf TWA PEL (80)/(% SiO2) mg/m3 TWA VPEL 6 mg/m3 - TWA	OELs not established	Not Established

4-Methyl, 2-Pentanone 108-10-1	PEL 100ppm - TWA VPEL 50ppm - TWA VPEL 75ppm - STEL	TLV 20ppm - TWA TLV 75ppm - STEL	Not Established
Propylene Glycol Monomethyl Ether Acetate 108-65-6	OELs not established	OELs not established	Not Established
Urea P/W Formaldehyde, Isobutylated 68002-18-6	Not Established	Not Established	Not Established
Barium chromate 10294-40-3	OELs not established	OELs not established	Not Established

8.2. Exposure controls

Appropriate engineering controls: Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

Hand Protection: Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296 .Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl . Suitable gloves for this specific application can be recommended by the glove supplier.

Eye Protection: Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection: Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure

Respiratory Protection: Use NIOSH-approved dust/particulate respirator. Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment..

Section 9 - Physical and chemical properties

Appearance Viscous liquid either colored or clear depending on product	**Odor** NA
Physical State Liquid	**Boiling Range** 108 to 150 °C
% Volume Volatile 36.12	**Specific Gravity (SG)** 1.450
Formula Lb / Gal 12.10	**Lbs VOC/Gallon Less Water** 2.62
gms VOC/Liter Less Water 314	

Section 10 - Stability and reactivity

10.1 Reactivity

10.2. Chemical stability

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

10.5. Incompatible materials

10.6. Hazardous decomposition products

STABLE

Strong oxidizing agents
Alkali metals, aluminum, Halogens, lead, strong mineral acids, strong oxidizing agents.
Mineral acids and strong oxidizers
Strong inorganic acids
Non-reactive material.
Caustics, and strong oxidizers

Oxides of carbon, such as carbon dioxide & carbon monoxide.
Material will ash when exposed to extremely high temperatures and flame.
Hazardous polymerization will not occur.

Section 11 - Toxicological information

Mixture Toxicity

Dermal Toxicity LD50: 3,927mg/kg
Inhalation Toxicity LC50: 145mg/L

Component Toxicity

25068-38-6	Bisphenol-A Epichlorohydrin Dermal LD50: 2,000 mg/kg (Rat)
108-88-3	Toluol Oral LD50: 636 mg/kg (Rat)
1330-20-7	Xylol Oral LD50: 3,523 mg/kg (Rat) Dermal LD50: 1,100 mg/kg (Judgement)
108-10-1	4-Methyl, 2-Pentanone Oral LD50: 2,080 mg/kg (Rat) Inhalation LC50: 16 mg/L (Rat)
108-65-6	Propylene Glycol Monomethyl Ether Acetate Dermal LD50: 5,000 mg/kg (Rabbit) Inhalation LC50: 23 mg/L (Rat)
68002-18-6	Urea P/W Formaldehyde, Isobutylated Oral LD50: 2,000 mg/kg (Rat) Dermal LD50: 2,000 mg/kg (Rabbit) Inhalation LC50: 8 mg/L (Rat)

Acute toxicity:
Skin corrosion/irritation:
Serious eye damage/irritation:
Respiratory or skin sensitisation:
Germ cell mutagenicity:
Carcinogenicity:
Reproductive toxicity:
Specific target organ toxicity (single exposure):
Specific target organ toxicity (repeated exposure):
Aspiration hazard:
Symptoms/injuries:
Symptoms/injuries after inhalation:
Symptoms/injuries after skin contact:
Symptoms/injuries after eye contact:
Symptoms/injuries after ingestion:
Chronic symptoms:

Inhalation Skin Contact Eye Contact Ingestion

Blood Eyes Kidneys Liver Lungs Central Nervous System Skin

Effects of Overexposure

Eye Contact — Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Temporary irritation. Not a primary eye irritant, mechanical irritation only.

Skin Contact	May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use. Not a skin irritant. Not a primary skin irritant, not absorbed through skin.
Ingestion	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 lung injury. Not hazardous when ingested. Unlikely to be toxic by ingestion. Toxic and may be harmful if swallowed; may produce liver or kidney damage. Can cause tissue destruction, hemorrhage changes in the gastrointestinal tract, bleeding, and pathological lesions in the kidneys.
Inhalation	Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symtoms usually occur at air concentrations higher than the recommended exposure limits. This product contains crystalline silica, which is considered a hazard by inhalation as a respirable dust only. IARC has classified inhalation of crystalline silica as carcinogenic for humans (group I). Inhalation of crystalline silica is also a known cause of silicosis, a noncancerous lung disease. Inhalation of high concentrations may cause mechanical irritation and discomfort. Repeated overexposure can cause chronic effects. These effects are only from talc dust itself as an airborne particle. Epidemiological studies indicate that long term exposure to high level dust and mist from chromate compounds is associated with increase in respiratory tract cancer in humans. The causitive agent is not known. Prolonged inhalation may cause liver damage.
Symptoms of Exposure	Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: mouth and throat irritation, stomach or intestinal upset, irritation of the nose,throat & airways, central nervous system depression, high blood sugar, coma. Prolonged exposure to excessive airborne concentrations of talc can result in scarring of the lungs (pheumoconiosis) or of the covering of the lungs (pleural thickening). Pneumoconiosis may produce symptoms of cough or shortness of breath. Pleural thickening usually produces no symptoms. Conditions can be determined by chest radiographic examination and pulmonary function test (FEV & FVC). Bronchial irritation may cause sputum production.
Target Organ Effects	This material shortens the time of onset or worsens the liver and kidney damage induced by other chemicals. Overexposure to this material has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects, blood abnormalities. No Data

Cancer Information	Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is NOT listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration. Some isomers of Xylene may contain Ethylbenzene which has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain. IARC has classified Ethylbenzene as a possible carcinogen. Talc may contain trace amounts of quartz (crystalline silica). Overexposure to respirable crystalline silica dust can cause silicosis, a form of progressive pulmonary fibrosis. "Inhalable" crystalline silica is listed by IARC as a Group I carcinogen (lung) based on "sufficient evidence" in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a substance reasonably anticipated to be a carcinogen. Some human studies have not demonstrated a cancer association and considerable controversy exists. This talc has been tested as a whole and in parts in several animal studies with no carcinogenic association demonstrated. Epidemiologic studies in humans have been interpreted in conflicting ways with no clear evidence of an increased risk in lung tumors in association with exposure. Human, animal and in-vitro tests of basic product ingredients do not show a carcinogenic effect. All talc is of the non-asbestos form. Note: These effects and tests have only been as a result of the raw respirable dust, and not when incorporated as a component of another material.
Developmental Info.	This material (or a component) may be harmful to the human fetus based on positive test results with laboratory animals. Case studies show that prolonged intentional abuse of this product during pregnancy can cause birth defects in humans.

CAS Number	Description	% Weight	Carcinogen Rating
10294-40-3	Barium chromate	I% - 1.0%	
7789-06-2	Strontium Chromate	0% - 20%	No specific references. Suspect cancer hazard as a chromate compound.

Section 12 - Ecological information

No data available

Component Ecotoxicity

Section 13 - Disposal considerations

Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.
Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.

Section 14 - Transport information

Agency	Proper Shipping Name	UN Number	Packing Group	Hazard Class
DOT	Paint; Flammable Liquid	UN 1263	II	3

Section 15 - Regulatory information

United States Regulatory Information

TSCA 8 (b) Inventory Status:

All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

108-10-1 4-Methyl, 2-Pentanone 1 - 5%
13463-67-7 Titanium Dioxide 1 - 5%
108-88-3 Toluene 5 - 10%

Commonwealth of Massachusetts "Right to Know": This product contains the following toxic or hazardous substances which appear on the Massachusetts Substance List:

4-Methyl, 2-Pentanone 1 - 5%
Titanium Dioxide 1 - 5%
Amorphous Silica 5 - 10%
Xylene (mixed) 5 - 10%
Toluene 5 - 10%
Calcium Magnesium Silicate Hydrate-Non-Asbestos 10 - 20%
Strontium Chromate 10 - 20%

New Jersey Worker and Community Right To Know Hazardous Substance List: The following substances appear on the New Jersey Right To Know Hazardous Substance List.

4-Methyl, 2-Pentanone 1 - 5%
Amorphous Silica 1 - 5%
Titanium Dioxide 1 - 5%
Xylene (mixed) 5 - 10%
Toluene 5 - 10%
Calcium Magnesium Silicate Hydrate-Non-Asbestos 10 - 20%
Strontium Chromate 10 - 20%

Commonwealth of Pennsylvania Worker and Community Right-To-Know Act: This product contains the following chemicals which appear on the Pennsylvania Hazardous Substance List:

108-10-1
13463-67-7
63231-67-4
1330-20-7
108-88-3
14807-96-6
7789-06-2

Country	Regulation	All Components Listed

EU Risk Phrases

Safety Phrase

All components of this product are listed on the TSCA Inventory or are exempt.

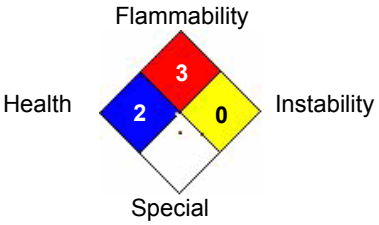
Section 16 - Other information

Author: BCS

Hazardous Material Information System (HMIS) **National Fire Protection Association (NFPA)**

HEALTH		2
FLAMMABILITY		3
PHYSICAL HAZARD		0
PERSONAL PROTECTION		

HMIS & NFPA Hazard Rating
Legend
*** = Chronic Health Hazard**
0 = INSIGNIFICANT
1 = SLIGHT
2 = MODERATE
3 = HIGH



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Reviewer Revision

Date Prepared: 3/7/2022

Safety Data Sheet

Prepared according to Federal Register / vol. 77, No. 58/ Monday, March 26, 2012 / Rules and Regulations

for

Coatings, Thinners, & Solvent Based Materials

Section 1 - Company & Product Identification

Product Name: Low VOC Epoxy Primer Part B Product Code: 1007-B (J-K)

Trade Name: **MIL-PRF-23377 Type I, Class 2 Epoxy Touch-up Pen Part B**

Manufactured by:

Spectrum Coatings Laboratories, Inc.
217 Chapman Street
Providence, RI 02905
ph:401-781-4847
fax:401-781-1075
web: spectrumcoatings.us
email: paintman97@gmail.com

Emergency Contact Information:

Daytime Information: 8:00am - 4:30pm EST
401-781-4847

24 Hour Emergency Contact:
Chemtrec - 800-424-9300
International: +1 703-527-3887
Emergency Information Only

Product filled by : Delaware Paint Company 8455 Rausch Drive Plain City, Ohio 43064 740-368-9981

Product Use: Professional Industrial and Commercial Spray Painting
Not recommended for: Commodity General Public Use

Section 2 - Hazards Identification

GHS Ratings:

Flammable liquid	2	Flash point < 23°C and initial boiling point > 35°C (95°F)
Skin corrosive	1B	Destruction of dermal tissue: Exposure < 1 hour Observation < 14 days, visible necrosis in at least one animal
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
Skin sensitizer	1	Skin sensitizer
Carcinogen	2	Limited evidence of human or animal carcinogenicity
Reproductive toxin	2	Human or animal evidence possibly with other information
Aspiration hazard	1	Aspiration Toxicity Category 1: Known (regarded)- human evidence - hydrocarbons with kinematic viscosity ? 20.5 mm2/s at 40° C.

GHS Hazards

H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child

GHS Precautions

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P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking
P233	Keep container tightly closed
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P241	Use explosion-proof electrical/ventilating/lighting/all motorized electrical equipment being used in the area where this material is being handled
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash all exposed areas thoroughly after handling
P272	Contaminated work clothing should not be allowed out of the workplace
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P310	Immediately call a POISON CENTER or doctor/physician
P321	Specific treatment (see Section 4 and 11 of SDS)
P331	Do NOT induce vomiting
P363	Wash contaminated clothing before reuse
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302+P352	IF ON SKIN: Wash with soap and water
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
P370+P378	In case of fire: Use CO2, Foam, or Chemical Extinguisher for extinction
P405	Store locked up
P403+P235	Store in a well ventilated place. Keep cool
P501	Dispose of contents/container to suitable waste stream in accordance with local, regional, national, and international regulations.

Signal Word: Danger

Section 3 - Hazardous Ingredient Information

Chemical Name	CAS number	Weight Concentration %
Polyamide Resin Solids	68410-23-1	40.00% - 50.00%
Phenylmethyl Alcohol	100-51-6	10.00% - 20.00%
Toluol	108-88-3	5.00% - 10.00%
Xylol	1330-20-7	5.00% - 10.00%
4-Methyl, 2-Pentanone	108-10-1	1.00% - 5.00%
Propylene Glycol Monomethyl Ether Acetate	108-65-6	1.00% - 5.00%
1,2-Ethanediamine, n-(2-aminoethyl)	111-40-0	1.00% - 5.00%
Triethylenetetramine	112-24-3	1.00% - 5.00%

Section 4 - Emergency First Aid Measures

Inhalation: 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.

Eye Contact: If symptoms develop, move individual away from exposure, and into fresh air. Flush eyes gently with water shile holding eyelids apart. If symptoms persist or if there is any visual difficulty, seek immediate medical attention.

Skin Contact: Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion: 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 individual unattended.

Note to Physician: Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: lung (ie; asthma-like conditions), skin (redness or rash-like symptoms, irritation)

Section 5 - Fire Fighting Measures

Flash Point: 7 C (45 F)

LEL: 1.00 UEL: 8.00

Extinguishing Media: Use foam, Carbon Dioxide, or Dry Chemical fire fighting apparatus.

Unusual Fire & Explosion Hazards: Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, pilot lights, other flames, or other ignition sources at locations distant from material handling area. Never use welding or cutting torch on or near containers even when empty, as product and/or product residue can ignite explosively.

Hazardous Products of Combustion: May form oxides of carbon, and nitrogen.

Special Fire Fighting Proceedures: Treat all fires as chemical in nature. The use of water may be unsuitable as an extinguishing media, but will be helpful in keeping adjacent containers cool. Avoid spreading burning liquid with water used for cooling purposes.

Fire Fighting Equipment: Firemen and emergency responders: wear full turnout gear or Level A equipment, including positive-pressure, self-contained breathing apparatus (SCBA), and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

Section 6 - Accidental Release Measures

Spill and Leak Proceedures: Spill supervisor - Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Remove all ignition sources. Keep nonessential personnel away from the contaminated area.

Small Spills: Ventillate area, and keep sources of ignition and hot metal surfaces isolated from the spill. Absorb liquid using vemiculite, sawdust, speedy-dry, or other suitable floor absorbant material. Use only non-sparking tools to collect and transfer to a suitable container for disposal in accordance with local, and federal regulations.

Large Spills: Eliminate all ignition sources, and ventilate area. Persons not wearing protective wequipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, and prevent material from entering drains, sewers, streams or other bodies of water. Dike spill area with suitable absorbant material or chemical booms to limit spreading. If run-off occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product, and transfer contaminated absorbent, soil and other materials to containers for disposal in accordance with local, state, and federal regulations. Note; use only non-sparking equipment to clean up spills.

Section 7 - Handling and Storage Conditions

Handling Precautions: Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers dry and closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Sufficeintly ground container when transfering material from one container to another.

Emergency eyewash fountains and safety showers should be available in the immediate vicinity of potential

exposure. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperatures and pressures, or sudden ingress of air into vacuum equipment, may result in ignitions without the presince of obvious ignition sources. Any use of this product in elevated temperature, pressurized, or vacuum process should be thoroughly evaluated to establish and maintain safe operating conditions.
Storage Requirements: Store this material in tightly sealed original containers only, in a segregated area with adequate ventilation to prevent a build-up of "fumes" that could pose a safety hazard with regard to personal exposure and fire. Keep all sources of ignition away from storage area, and store material at temperatures between 50 to 80 degrees F.

Section 8 - Exposure Controls & Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Polyamide Resin Solids 68410-23-1	OELs not established	OELs not established	Not Established
Phenylmethyl Alcohol 100-51-6	None Assigned	None Assigned	PEL 25ppm - TWA
Toluol 108-88-3	PEL 200ppm - TWA PEL 300ppm - Ceiling VPEL 100ppm - TWA VPEL 150ppm - STEL	TLV 20ppm - TWA	Not Established
Xylol 1330-20-7	PEL 100ppm - TWA VPEL 100ppm - TWA VPEL 150ppm - STEL	TLV 100ppm - TWA TLV 150ppm - STEL	46ppm TWA
4-Methyl, 2-Pentanone 108-10-1	PEL 100ppm - TWA VPEL 50ppm - TWA VPEL 75ppm - STEL	TLV 20ppm - TWA TLV 75ppm - STEL	Not Established
Propylene Glycol Monomethyl Ether Acetate 108-65-6	OELs not established	OELs not established	Not Established
1,2-Ethanediamine, n-(2-aminoethyl) 111-40-0	vPEL 1ppm TWA vPEL 4 mg/m3 TWA	TLV 1ppm TWA TLV 4.2 mg/m3 TWA	Not Established
Triethylenetetramine 112-24-3	Not Established	Not Established	Ontario TWA: 0.5 ppm TWA: 3 mg/ M3 Skin

Engineering Controls: Ensure that any processing ovens are vented to prevent the introduction of fumes into the workplace, and to prevent a build up of fume within the oven. Use only explosion proof equipment, and ground containers and transfer equipment. Use only chemically resistant transfer equipment, and measuring containers.
Recommended Ventilation: General mechanical ventilation may be sufficient to keep product vapor concentrations within specified time-weighted averages. If general ventilation proves inadequate to maintain safe vapor concentrations, supplemental local exhaust may be required.

Eye Protection: The use of safety glasses, chemical goggles, and/or face shields are recommended to safeguard against potential eye contact, irritation, or injury. The availability of eye wash stations when using this product is highly recommended.

Skin Protection: The use of chemical resistant gloves is recommended to prevent repeated or prolonged contact with the skin. Wear impervious clothing and boots. The use of chemical aprons is advised when working with and/or transfering these materials. The availability of safety showers in work areas is recommended.

Respiratory Protection: If workplace exposure limits of product or any component is exceeded, the use of a NIOSH/MSHA respirator will be necessary. In general the use of an organic vapor cartridge with a dust/mist pre-filter will be sufficeint. In the absence of proper environmental controls, a NIOSH/MSHA approved air supplied respirator is advised.

Contaminated Equipment: Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

Section 9 - Physical & Chemical Properties

This mixture typically exhibits the following properties under normal circumstances.

Appearance Viscous liquid either colored or clear depending on product.	**Odor** Strong solvent odor.
Physical State Liquid	**Vapor Density** Heavier than air.
Evaporation Rate Slower than ether.	**Boiling Range** 108 to 282 °C
% Volume Volatile 44.57	**Specific Gravity (SG)** 0.968
Formula Lb / Gal 8.08	**Lbs VOC/Gallon Less Water** 2.92
gms VOC/Liter Less Water 349	

Section 10 - Reactivity Data

Components of this mixture may be incompatible with various materials, and will fume certain combustion products. It is recommended that only Spectrum's authorized materials are combined with Spectrum's finished products.

STABLE

The following incompatabilities may exist with components of this product.

Strong oxidizing agents

Alkali metals, aluminum, Halogens, lead, strong mineral acids, strong oxidizing agents.

Mineral acids and strong oxidizers

Strong oxidizing agents, acids, and alkali/base/caustic solutions, and heat.

Thermal decomposition in the presence of air may yeild the following;

Oxides of carbon, such as carbon dioxide & carbon monoxide.

Hazardous polymerization will not occur.

Section 11 - Toxicological Information

(IF NO DATA IS AVAILABLE, THIS SECTION WILL BE BLANK)

Mixture Toxicity

Oral Toxicity LD50: 2,406mg/kg
Dermal Toxicity LD50: 3,312mg/kg
Inhalation Toxicity LC50: 108mg/L

Component Toxicity

100-51-6	Phenylmethyl Alcohol Oral LD50: 1,040 mg/kg (rat) Dermal LD50: 2,000 mg/kg (rabbit)
108-88-3	Toluol Oral LD50: 636 mg/kg (Rat)
1330-20-7	Xylol Oral LD50: 3,523 mg/kg (Rat) Dermal LD50: 1,100 mg/kg (Judgement)
108-10-1	4-Methyl, 2-Pentanone Oral LD50: 2,080 mg/kg (Rat) Inhalation LC50: 16 mg/L (Rat)
108-65-6	Propylene Glycol Monomethyl Ether Acetate Dermal LD50: 5,000 mg/kg (Rabbit) Inhalation LC50: 23 mg/L (Rat)
111-40-0	1,2-Ethanediamine, n-(2-aminoethyl) Oral LD50: 819 mg/kg (Rat) Dermal LD50: 672 mg/kg (Rabbit)
112-24-3	Triethylenetetramine Oral LD50: 2,500 mg/kg (Rat) Dermal LD50: 550 mg/kg (Rabbit)

Primary Routes of Entry:

Inhalation Skin Contact Eye Contact Ingestion

Target Organs:

Blood Eyes Kidneys Liver Lungs Central Nervous System Skin Respiratory System

Effects of Overexposure

Eye Contact	Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Causes eye burns. May cause blindness, and or severe eye irritation.
Skin Contact	May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use. Harmful in contact with skin. Causes skin burns.
Ingestion	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 lung injury. Harmful if swallowed, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.
Inhalation	Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symtoms usually occur at air concentrations higher than the recommended exposure limits. Inhalation of aerosol may cause irritation to the upper respiratory tract. Can cause severe eye, skin and respiratory tract burns. May cause nose, throat, and lung irritation.
Symptoms of Exposure	Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: mouth and throat irritation, stomach or intestinal upset, irritation of the nose,throat & airways, central nervous system depression, high blood sugar, coma.
Target Organ Effects	This material shortens the time of onset or worsens the liver and kidney damage induced by other chemicals. Overexposure to this material has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects, blood abnormalities.
Cancer Information	Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is NOT listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration. Some isomers of Xylene may contain Ethylbenzene which has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain. IARC has classified Ethylbenzene as a possible carcinogen.
Developmental Info.	This material (or a component) may be harmful to the human fetus based on positive test results with laboratory animals. Case studies show that prolonged intentional abuse of this product during pregnancy can cause birth defects in humans.

Carcinogenicity: The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing).

CAS Number	Description	% Weight	Carcinogen Rating
None			N/A

Section 12 - Ecological Information

(IF NO DATA IS AVAILABLE, THIS SECTION WILL BE BLANK)

Component Ecotoxicity

Section 13 - Waste Disposal Considerations

As the US EPA, state, regional, and other regulatory agencies may have jurisdiction over the disposal of your facility's hazardous waste, it is incumbent upon you, the hazardous waste generator, to learn of and satisfy all the requirements which affect you. Dispose of the hazardous waste at a properly licensed and permitted disposal site or

facility. Ensure conformity to all applicable hazardous waste disposal regulations.

The US EPA Hazardous Waste Numbers which follow are applicable to this unadulterated product if the product enters the "waste stream." Refer to Title 40 of the Code of Federal Regulations, Part 261 (40 CFR 261). This part of the Code identifies solid wastes which are subject to regulation under various sections of the Code and which are subject to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act (RCRA).

Section 14 - Transportation Information

This material is classified for transport as follows:

Agency	Proper Shipping Name	UN Number	Packing Group	Hazard Class
DOT	Paint; Flammable Liquid	UN 1263	II	3

Section 15 - Regulatory Information

Other regulatory information is listed where applicable.

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

108-10-1 4-Methyl, 2-Pentanone 1 to 5 %
108-88-3 Toluene 5 to 10 %

Commonwealth of Massachusetts "Right to Know": This product contains the following toxic or hazardous substances which appear on the Massachusetts Substance List:

1,2-Ethanediamine, n-(2-aminoethyl) 1 to 5 %
4-Methyl, 2-Pentanone 1 to 5 %
Xylene (mixed) 5 to 10 %
Toluene 5 to 10 %
Phenylmethyl Alcohol 10 to 20 %

New Jersey Worker and Community Right To Know Hazardous Substance List: The following substances appear on the New Jersey Right To Know Hazardous Substance List.

1,2-Ethanediamine, n-(2-aminoethyl) 1 to 5 %
4-Methyl, 2-Pentanone 1 to 5 %
Xylene (mixed) 5 to 10 %
Toluene 5 to 10 %

Commonwealth of Pennsylvania Worker and Community Right-To-Know Act: This product contains the following chemicals which appear on the Pennsylvania Hazardous Substance List:

111-40-0
108-10-1
1330-20-7
108-88-3
100-51-6

Country	Regulation	All Components Listed

EU Risk Phrases

Safety Phrase

Toxic Substances Control Act (TSCA): All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

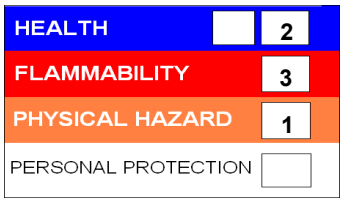
- None

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act, and Title 40 of the Code of Federal Regulations, part 372.

108-10-1	4-Methyl, 2-Pentanone	1.0 - 5%
1330-20-7	Xylol	5 - 10%
108-88-3	Toluol	5 - 10%

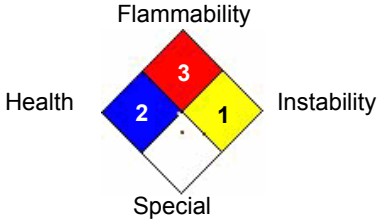
Section 16 - Other Information

Hazardous Material Information System (HMIS)



HMIS & NFPA Hazard Rating Legend
*** = Chronic Health Hazard**
0 = INSIGNIFICANT
1 = SLIGHT
2 = MODERATE
3 = HIGH

National Fire Protection Association (NFPA)



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Reviewer Revision

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