Section 1 - Company & Product Identification

Product Name: MIL-DTL-15090E Enamel    Product Code: 31793
Trade Name: Low VOC Formula

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 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 3 Reversible adverse effects in dermal tissue, Draize score: >= 1.5 < 2.3
- Mutagen 1B Known to produce heritable mutations in human germ cells
  Subcategory 1B, Positive results: In vivo heritable germ cell tests in mammals, Human germ cell tests, In vivo somatic mutagenicity tests, combined with some evidence of germ cell mutagenicity
- Carcinogen 1B Presumed Human Carcinogen, Based on demonstrated animal carcinogenicity
- 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
- H316 Causes mild skin irritation
- H340 May cause genetic defects
- H350 May cause cancer

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
Section 3 - Composition/information on ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS number</th>
<th>Weight Concentration %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Limestone</td>
<td>1317-65-3</td>
<td>30.00% - 40.00%</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>N/A</td>
<td>20.00% - 30.00%</td>
</tr>
<tr>
<td>Stoddard Solvent</td>
<td>8052-41-3</td>
<td>10.00% - 20.00%</td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>13463-67-7</td>
<td>1.00% - 5.00%</td>
</tr>
<tr>
<td>1-chloro-4-(trifluoromethyl)-benzene</td>
<td>98-56-6</td>
<td>1.00% - 5.00%</td>
</tr>
<tr>
<td>Aliphatic Petroleum Distillate</td>
<td>64742-89-8</td>
<td>1.00% - 5.00%</td>
</tr>
<tr>
<td>Zinc Oxide</td>
<td>1314-13-2</td>
<td>1.00% - 5.00%</td>
</tr>
<tr>
<td>Calcium Magnesium Silicate Hydrate</td>
<td>14807-96-6</td>
<td>1.00% - 5.00%</td>
</tr>
<tr>
<td>Barium Sulfate</td>
<td>7727-43-7</td>
<td>0.10% - 1.00%</td>
</tr>
</tbody>
</table>

Section 2 - 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: 38 C (101 F)
LEL: 1.00 UEL: 11.00

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 incompatibilities
Storage Conditions:
Storage Temperature:

Section 8 - Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Chemical Name / CAS No.</th>
<th>OSHA Exposure Limits</th>
<th>ACGIH Exposure Limits</th>
<th>Other Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Limestone 1317-65-3</td>
<td>PEL 5mg/m² - TWA (respirable fraction) PEL 15mg/m³ - TWA (total dust)</td>
<td>OELs not established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Trade Secret N/A</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Stoddard Solvent 8052-41-3</td>
<td>VPEL 100ppm - TWA PEL - 500ppm - TWA</td>
<td>TLV 100ppm - TWA</td>
<td>Not Established</td>
</tr>
<tr>
<td>Titanium Dioxide 13463-67-7</td>
<td>PEL 15mg/m³ - TWA (total dust)</td>
<td>TLV 10mg/m³ - TWA (total dust)</td>
<td>Not Established</td>
</tr>
<tr>
<td>1-chloro-4-(trifluoromethyl)-benzene 98-56-6</td>
<td>OELs not established</td>
<td>OELs not established</td>
<td>CEL 25ppm - TWA</td>
</tr>
<tr>
<td>Aliphatic Petroleum Distillate 64742-89-8</td>
<td>OELs not established</td>
<td>OELs not established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Zinc Oxide 1314-13-2</td>
<td>PEL 15 mg/m³ - TWA (total dust) PEL 5 mg/m³ - TWA (respirable fraction) vPEL 10 mg/m³ - STEL (fume)</td>
<td>TLV 2 mg/m³ - TWA (respirable fraction) TLV 10 mg/m³ - STEL (respirable fraction)</td>
<td>Not Established</td>
</tr>
<tr>
<td>Calcium Magnesium Silicate Hydrate 14807-96-6</td>
<td>PEL - 20 mppcf - TWA (if 1% Quartz or more, use Quartz limit) VPEL - 2 mg/m³ - TWA (respirable dust)</td>
<td>TLV 2 mg/m³ - TWA (respirable fraction)</td>
<td>Not Established</td>
</tr>
<tr>
<td>Barium Sulfate 7727-43-7</td>
<td>PEL 15 mg/m³ TWA (total dust) PEL 5 mg/m³ TWA (respirable fraction)</td>
<td>TLV - 10 mg/m³ TWA</td>
<td>Not Established</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Viscous liquid either colored or clear depending on product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>% Volume Volatile</td>
<td>44.50</td>
</tr>
<tr>
<td>Formula Lb / Gal</td>
<td>11.85</td>
</tr>
<tr>
<td>gms VOC/Liter Less Water</td>
<td>247</td>
</tr>
</tbody>
</table>

| Odor | NA |
| Boiling Range | 95 to 160 °C |
| Specific Gravity (SG) | 1.420 |
| Lbs VOC/Gallon Less Water | 2.06 |

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

Caustics, and strong oxidizers
Strong oxidizing agents
Acids, strong oxidizing agents.
Non-reactive material.

Oxides of carbon, such as carbon dioxide & carbon monoxide.
May produce Chlorine and/or Fluorine containing gases.
Material will ash when exposed to extremely high temperatures and flame.
Hazardous polymerization will not occur.

Section 11 - Toxicological information

Mixture Toxicity

Component Toxicity

98-56-6 1-chloro-4-(trifluoromethyl)-benzene
Dermal LD50: 2,700 mg/kg (Rabbit)

64742-89-8 Aliphatice Petroleum Distillate
Oral LD50: 5,000 mg/kg (Mouse) Dermal LD50: 3,000 mg/kg (Rabbit)

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:

<table>
<thead>
<tr>
<th>Inhalation</th>
<th>Skin Contact</th>
<th>Eye Contact</th>
<th>Ingestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>Kidneys</td>
<td>Liver</td>
<td>Lungs</td>
</tr>
</tbody>
</table>

**Effects of Overexposure**

**Eye Contact**
Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. 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 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. Unlikely to be toxic by ingestion.

**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. Symptoms usually occur at air concentrations higher than the recommended exposure limits. 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.

**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 (pneumoconiosis) 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**
No Data 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. 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.

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Description</th>
<th>% Weight</th>
<th>Carcinogen Rating</th>
</tr>
</thead>
</table>

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

<table>
<thead>
<tr>
<th>Agency</th>
<th>Proper Shipping Name</th>
<th>UN Number</th>
<th>Packing Group</th>
<th>Hazard Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>Paint: Flammable Liquid</td>
<td>1263</td>
<td>II</td>
<td>3</td>
</tr>
</tbody>
</table>

Section 15 - Regulatory information


This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

- 13463-67-7 Titanium Dioxide 1 to 5 %

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

- Barium Sulfate 0.1 to 1.0 %
- Calcium Magnesium Silicate Hydrate 1 to 5 %
- Zinc Oxide 1 to 5 %
- Titanium Dioxide 1 to 5 %
Stoddard Solvent  10 to 20 %
Ground Limestone  30 to 40 %

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.
- Barium Sulfate  0.1 to 1.0 %
- Calcium Magnesium Silicate Hydrate  1 to 5 %
- Zinc Oxide  1 to 5 %
- Titanium Dioxide  1 to 5 %
- Stoddard Solvent  10 to 20 %
- Ground Limestone  30 to 40 %

Commonwealth of Pennsylvania Worker and Community Right-To-Know Act: This product contains the following chemicals which appear on the Pennsylvania Hazardous Substance List:
- 7727-43-7
- 14807-96-6
- 1314-13-2
- 13463-67-7
- 8052-41-3
- 1317-65-3

<table>
<thead>
<tr>
<th>Country</th>
<th>Regulation</th>
<th>All Components Listed</th>
</tr>
</thead>
</table>

EU Risk Phrases

Safety Phrase

All components of this product are listed on the TSCA Inventory or are exempt.
- None

Section 16 - Other information

Author: BCS

Hazardous Material Information System (HMIS)

National Fire Protection Association (NFPA)

Legend
- Health
- Flammability
- Physical Hazard
- Special

HMIS & NFPA Hazard Rating

0 = INSIGNIFICANT
1 = SLIGHT
2 = MODERATE
3 = HIGH

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Date Prepared:  6/10/2015