Section 1 - Company & Product Identification

Product Name: Zinc Molybdate, Alkyd Primer  Product Code: TT-P-645
Trade Name: TT-P-645B
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 3 - Hazards Identification

GHS Ratings:
- Flammable liquid 3 Flash point >= 23°C and <= 60°C (140°F)
- 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
- H226 Flammable liquid and vapour
- H304 May be fatal if swallowed and enters airways
- 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
- P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
P280 Wear protective gloves/protective clothing/eye protection/face protection
P281 Use personal protective equipment as required
P331 Do NOT induce vomiting
P301+P302 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.
Rinse skin with water/shower
P308+P313 IF exposed or concerned: 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 2 - Hazardous Ingredient Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS number</th>
<th>Weight Concentration %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td>N/A</td>
<td>20.00% - 30.00%</td>
</tr>
<tr>
<td>Zinc Molybdate</td>
<td>61583-60-6</td>
<td>20.00% - 30.00%</td>
</tr>
<tr>
<td>Stoddard Solvent</td>
<td>8052-41-3</td>
<td>20.00% - 30.00%</td>
</tr>
<tr>
<td>Nickel Antimony Titanate</td>
<td>8007-18-9</td>
<td>10.00% - 20.00%</td>
</tr>
<tr>
<td>Calcium Magnesium Silicate Hydrate</td>
<td>14807-96-6</td>
<td>5.00% - 10.00%</td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>13463-67-7</td>
<td>5.00% - 10.00%</td>
</tr>
</tbody>
</table>

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 while 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:   40 C (104 F)
LEL: 1.00  UEL: 6.00
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 Procedures: 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: Ventilate area, and keep sources of ignition and hot metal surfaces isolated from the spill. Absorb liquid using vermiculite, 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 equipment 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. Sufficiently ground container when transferring 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 presence 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

<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>Trade Secret N/A</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Zinc Molybdate 61583-60-6</td>
<td>OELs not established</td>
<td>OELs not established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Stoddard Solvent 8052-41-3</td>
<td>VPEL 100ppm - TWA</td>
<td>TLV 100ppm - TWA</td>
<td>Not Established</td>
</tr>
</tbody>
</table>
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 transferring 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 sufficient. 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.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Viscous liquid either colored or clear depending on product.</td>
</tr>
<tr>
<td>Odor</td>
<td>Strong solvent odor.</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Slower than ether.</td>
</tr>
<tr>
<td>% Volume Volatile</td>
<td>42.82</td>
</tr>
<tr>
<td>Formula Lb / Gal</td>
<td>13.58</td>
</tr>
<tr>
<td>gms VOC/Liter Less Water</td>
<td>332</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Heavier than air.</td>
</tr>
<tr>
<td>Boiling Range</td>
<td>154 to 160 °C</td>
</tr>
<tr>
<td>Specific Gravity (SG)</td>
<td>1.628</td>
</tr>
<tr>
<td>Lbs VOC/Gallon Less Water</td>
<td>2.77</td>
</tr>
</tbody>
</table>

### 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 incompatibilities may exist with components of this product.

- Strong oxidizing agents
- Non-reactive material
- Mineral acids and strong oxidizers
- Caustics, and strong oxidizers

Thermal decomposition in the presence of air may yeild the following:
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**

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

**Mixture Toxicity**

**Component Toxicity**

**Primary Routes of Entry:**

<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>Lungs</td>
<td>Central Nervous System</td>
<td>Skin</td>
</tr>
</tbody>
</table>

**Target Organs:**

- **Eyes**
- **Lungs**
- **Central Nervous System**
- **Skin**

**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**

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
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.

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).

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Description</th>
<th>% Weight</th>
<th>Carcinogen Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

### 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:

<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>III</td>
<td>3</td>
</tr>
</tbody>
</table>

### Section 15 - Regulatory Information

Other regulatory information is listed where applicable.


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 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:
- Titanium Dioxide  5 to 10 %
- Calcium Magnesium Silicate Hydrate  5 to 10 %
- Stoddard Solvent  20 to 30 %

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.
- Titanium Dioxide  5 to 10 %
- Calcium Magnesium Silicate Hydrate  5 to 10 %
- Stoddard Solvent  20 to 30 %

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

<table>
<thead>
<tr>
<th>Country</th>
<th>Regulation</th>
<th>All Components Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU Risk Phrases</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

Section 16 - Other Information

Hazardous Material Information System (HMIS)

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>PHYSICAL HAZARD</th>
<th>PERSONAL PROTECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>0</td>
<td>J</td>
</tr>
</tbody>
</table>

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

National Fire Protection Association (NFPA)

Flammability
Health
Instability
Special

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Date Prepared: 6/9/2015

Reviewer Revision

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