Material Safety Data Sheet

Product Number: 6471-Mason Stein

Date Prepared: 3/2000

Section 1: Manufacturer Identification

Mason Color Works, Inc.
250 East 2nd Street/P.O. Box 76
East Liverpool, OH 43920-5076

Phone: (330) 385-4400
Fax: (330) 385-4488

Section 2: Identification of Product

Chemical Family: Inorganic
Product Names: Old Gold 6471
Chemical Abstract Number (CAS): 68186-93-6, 68186-88-9, 68186-95-8
Chemical Name: Chrome Iron Zinc Tin Vanadium Yellow
Chemical Formula: (Zr, V)SiO₄ + (Sn, V)O₂ + (Zn, Fe)(Fe, Cr)₂O₄

Section 3 & Section 4: Hazardous ingredients Identity/Information and Overexposure Symptoms

<table>
<thead>
<tr>
<th></th>
<th>ACGIH-TLVs</th>
<th>OSHA PELs</th>
<th>NOISHA RELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumina Oxide</td>
<td>10 mg/m³</td>
<td>15 mg/m³</td>
<td>N/A</td>
</tr>
<tr>
<td>(Al₂O₃)</td>
<td>(total)</td>
<td>(total)</td>
<td></td>
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<tr>
<td>Cas # 1344-28-1</td>
<td>5 mg/m³</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(respirable)</td>
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</table>

ACGIH: The value for particulate matter containing no asbestos and 1% crystalline silica.

Symptoms of overexposure:
- **Inhalation:** Acute may cause coughing and shortness of breath. Chronic may adversely effect breathing capacity.
- **Eye Contact:** Direct contact may cause irritation.
- **Skin Contact:** May cause abrasions.
- **Ingestion:** May cause irritation.

2. **Chrome Oxide (Cr₂O₃)**

Cas # 1313-13-2

ACGIH: Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of carcinogenicity in humans/animals.

Symptoms of overexposure:
- **Inhalation:** Repeated prolonged exposure to trivalent compounds may cause delayed effects involving the respiratory system.
- **Eye Contact:** mechanical irritation to the eye may occur such as watering, reddening do to exposure to fines.
- **Skin Contact:** Expected to be non-irritating.
- **Ingestion:** Considered to be non-irritating, non-toxic if swallowed.

3. **Cobalt Oxide (Co₃O₄)**

Cas # 1396-06-1

ACGIH: Animal carcinogen: Agent is carcinogenic in experimental animals at dose levels, by route (s) of administration at site, or histologic type, or by mechanism considered relevant to workers exposure. Available epidemiologic studies do not confirm an increased risk of cancer in humans except under common levels of exposure.
Cobalt Oxide cont'd

Symptoms of Overexposure:

**Inhalation:** Prolonged inhalation of dust or metal dust, and fume or mist containing cobalt may cause serious respiratory illness. May cause an irritation of respiratory organs of sensitive persons resulting in obstruction of airways with shortness of breath.

**Eye Contact:** May cause serious eye irritation.

**Skin Contact:** Prolonged exposure may produce irritation.

**Ingestion:** Large amounts may cause irritation of the gastrointestinal tract, nausea, vomiting and diarrhea.

<table>
<thead>
<tr>
<th>Iron Oxide (Fe₂O₃)</th>
<th>5 mg/m³</th>
<th>10 mg/m³</th>
<th>5 mg/m³</th>
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</thead>
<tbody>
<tr>
<td>Cas # 1309-37-1</td>
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</table>

ACGIH: Not classifiable as a human carcinogen; Inadequate data on which to classify the agent in terms of its carcinogenicity in humans/animals. The value is for particulate matter containing no asbestos and 1% crystalline silica.

Symptoms of overexposure:

**Inhalation:** Repeated and prolonged exposure may cause beginnings Pneumoconiosis called Sideorders.

**Eye Contact:** May cause irritation.

**Skin Contact:** May cause mechanical skin irritation.

**Ingestion:** Expected to be non-toxic.

<table>
<thead>
<tr>
<th>Silica, Crystalline (SiO₂)</th>
<th>0.1 mg/m³</th>
<th>10 mg/m³</th>
<th>0.05 mg/m³</th>
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<tbody>
<tr>
<td>Cas # 14808-60-7</td>
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</table>

Symptoms of overexposure:

**Inhalation:**

a) associated with increased incidence of Scleroderma, an auto-immune disorder manifested by Prolonged exposure to respirable crystalline silica (quartz) can cause Silicosis, a fibrosis (scarring) of the lungs. Silicosis may be progressive; it may lead to disability and death. Silicosis increases risk of Tuberculosis.

b) Inhaled from occupational sources is classified as carcinogenic to humans. (cancer)

c) There is evidence that exposure to respirable crystalline silica or that the disease Silicosis is fibrosis (scarring) of the skin and internal organs.

d) There are several studies suggesting that exposure to respirable silica or that the disease Silicosis is associated with the increased incidence of kidney disorders. (Nephrotoxicity)

**Eye Contact:** May cause abrasions of the cornea.

**Skin Contact:** Not applicable.

**Ingestion:** Not applicable.

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<tr>
<th>Tin Oxide (SnO)</th>
<th>2.0 mg/m³</th>
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<tr>
<td>Cas # 21651-19-4</td>
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Symptoms of overexposure:

**Inhalation:** No information found on acute overexposure. Chronic exposure to tin oxide fumes or dust may result in Stannosis, a form of Pneumoconiosis.

**Eye Contact:** Abrasive, mild irritant

**Skin Contact:** Possible irritant.

**Ingestion:** Considered non-toxic.

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<tr>
<th>Vanadium Oxide (VO₂)</th>
<th>0.05 mg/m³</th>
<th>0.05 mg/m³</th>
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<tbody>
<tr>
<td>Cas # 1314-62-1</td>
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</table>
Vanadium Oxide cont'd
Symptoms of overexposure:
  **Inhalation:** Irritation of the respiratory tract, chest tightness, wheezing, coughing.
  **Eye Contact:** Irritation possible with corneal injury.
  **Skin Contact:** Irritation with reddening and itching. Absorption of harmful amounts possible.
  **Ingestion:** Abdominal discomfort, nausea, vomiting, cramping. Harmless greenish tongue discoloration.

Zinc Oxide (ZnO)  
10 mg/m³  
5 mg/m³ (Respirable)
Cas # 1314-13-2

Symptoms of overexposure:
  **Inhalation:** High levels of dust may result in tightness of chest, metallic taste, cough, dizziness, fever, chills, headache, nausea, and dry throat. Chronic exposure may produce symptoms known as metal fume fever or “zinc shakes”, an acute, self-limiting condition without recognized complications. Symptoms of metal fume fever include: chills, fever, muscular pain, nausea and vomiting. May aggravate respiratory conditions.
  **Eye Contact:** May cause irritation.
  **Skin Contact:** May cause irritation.
  **Ingestion:** May cause irritation to the gastro-intestinal tract.

Zirconium Oxide (ZrO)  
10 mg/m³ (total)  
5 mg/m³ (respirable)
Cas # 1314-13-2

Symptoms of overexposure:
  **Inhalation:** Acute inhalation to respirable dust which contains radioactive uranium, thorium and radium may cause lung cancer.
  **Eye Contact:** May cause irritation with discomfort, tearing or blurring of vision.
  **Skin Contact:** Not applicable.

Section 5: Emergency and First Aid Procedures:

Eye: flush thoroughly with water for 15 minutes.
Skin: remove contaminated clothing, wash thoroughly with soap and water.
Inhalation: remove to fresh air, may give oxygen if needed.
Ingestion: give large amounts of water to induce vomiting, only in conscious persons.
**IF THESE FIRST AID MEASURES FAIL, CONSULT PHYSICIAN!!!!!!!!!!!!!!!!!!!**

Principal Routes of Entry:
Inhalation: Dust from this product may cause irritation of the respiratory system.
Overexposure may cause lung damage.
Ingestion: Large amounts may cause irritation of the gastrointestinal tract, nausea, vomiting and diarrhea.
Skin & Eye: Nuisance dust, prolonged or repeated may cause irritation.

Section 6: Special Protection Information

**Respiratory Protection:** Use only NIOSHA/OSHA approved respiratory protection with adequate ventilation; avoid breathing dust. Do not exceed Occupational Exposure Limits. Wash thoroughly after handling. No food or beverage should be consumed in work area.

**Personal Protective Equip:** Wear appropriate gloves and goggles to avoid skin and eye contact. Safety showers and eye stations must be present in work stations.

**Ventilation:** Use local exhaust or mechanical such as a dust collector to maintain dust levels below Occupational Exposure Limits.
Section 7: Physical and Chemical Characteristics

Boiling Point: N/A  Odor: odorless
Solubility in water: trace  Specific Gravity (water = 1): N/A
Vapor Pressure (mmHg): N/A  Evaporation rate: None
Vapor Density (air = 1): N/A  % Volatile by volume: None
Appearance: yellow powder

Section 8: Reactivity Data

Stability: Stable
Hazardous Polymerization: will not occur
Incompatibility: None
Hazard Decomposition of product: N/A

Section 9: Fire and Explosive Data

Flash point: N/A  Flammable Limits: None
Unusual Fire and Explosion Hazard: None expected
Extinguishing Media: Carbon dioxide, dry chemical or water
Special Fire Fighting Procedures: Wear self contained breathing apparatus when large quantities involved.

Section 10: Spill or Leak Procedures:

Contain spillage and scoop or vaccum. Avoid making dust, put in appropriate container for disposal. Waste disposal method in accordance with Federal, State and Local Laws.

**This product is a blend of various metal oxides, salts and some compounds which are interfused by high calcination to form the finished product. Section III, Hazardous Ingredients Identity/Information, and Section IV, Symptoms of Overexposure, pertain to individual components. Section V through Section X are in reference to the finished product.**

***Attention All Retailers of Mason Stains***

ALL retailers of this product are REQUIRED by law to supply their customers with a copy of this material safety data sheet with initial purchase.

***SARA 313***

This product contains certain oxides and compounds which are subject to reporting requirements of Superfund Amendment and Reauthorization Act (SARA) of 1986, Section 313 of the Emergency Planning and Community Right to Know Act and of 40 CRF, Part 372.

The information contained in this Material Safety Data Sheet must be provided to every employee who is exposed to this product in any way. We recommend the user reads and understands the contents herein before using this material.

PLEASE KEEP ON FILE FOR FUTURE REFERENCE. DO NOT THROW AWAY! MATERIAL SAFETY DATA SHEETS ARE REQUIRED FOR FIRST SHIPMENT, AND WILL BE SENT AGAIN WHEN REVISED UPON YOUR NEXT ORDER OF PRODUCT OR BY REQUEST.
DISCLAIMER

Mason Color Works, Inc. believes the information contained in this material safety data sheet is believed to be accurate and reliable as of the date of publication or revision but makes no warranty that it is. This information provided should be made available as required by the Federal OSHA Hazard Communication Standard 1910.1200 to ANYONE who handles, uses, stores, transports or will otherwise be exposed to this product. Mason Color Works, Inc. Accepts no Responsibility for the health or safety of any individual who misuses this product by not complying with manufacturer's instructions contained herein or additional/other measures that may be required under particular conditions.

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