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: Zirconium Yellow 6464  
Chemical Abstract Number (CAS): 68187-01-9  
Chemical Name: Zirconium Vanadium Yellow - Baddeleyite  
Chemical Formula: (Z,V)O₂

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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>ACGIH-TLVs</th>
<th>OSHA PELs</th>
<th>NOISHA RELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium Dioxide (TiO₂)</td>
<td>10 mg/m³</td>
<td>10 mg/m³ (total)</td>
<td>0.2 mg/m³</td>
</tr>
<tr>
<td>Cas # 13463-67-7</td>
<td></td>
<td></td>
<td>5 mg/m³ (respirable)</td>
</tr>
</tbody>
</table>

Symptoms of overexposure:

Inhalation: Inhalation of dust can cause irritation of the nose, throat, and lungs.  
Eye Contact: Like any foreign body, particles can cause mechanical irritation.  
Skin Contact: This material can cause irritation if not promptly washed from skin.  
Ingestion: This material is not expected to produce adverse effects.

<table>
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<th>ACGIH-TLVs</th>
<th>OSHA PELs</th>
<th>NOISHA RELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vanadium Oxide (VO₃)</td>
<td>0.05 mg/m³</td>
<td>0.05 mg/m³</td>
<td>0.05 mg/m³</td>
</tr>
<tr>
<td>Cas # 1314-62-1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

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<th>OSHA PELs</th>
<th>NOISHA RELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zirconium Oxide (ZnO)</td>
<td>10 mg/m³ (total)</td>
<td>15 mg/m³ (total)</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>Cas # 1314-13-2</td>
<td>5 mg/m³ (respirable)</td>
<td>5 mg/m³ (respirable)</td>
<td>15 min. C</td>
</tr>
</tbody>
</table>

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
Solubility in water: trace
Vapor Pressure (mmHg): N/A
Vapor Density (air=1): N/A
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.

Last issued: 11/97
Updated: 3/2000