



MANUFACTURERS OF CERAMIC COLORS

### Material Safety Data Sheet

Date Prepared: May 2003

Revision Date: April 2004

Product Number: 6350

#### 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

HMIS Classification:

Health	2*
Flammability	0
Reactivity	0
Personal Protection	See Section 6

\*Indicates possible chronic health effects.

#### SECTION 2: Identification of Product

Chemical Family: Inorganic  
Product Names: Bright Blue 6350  
Chemical Abstract Number(CAS) 68186-95-8, 68187-40-6  
Chemical Name: Cobalt Silicate Blue - Olovine  
Chemical Formula: (Zr,V)SiO<sub>4</sub>Co<sub>2</sub>

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

	ACGIH-TLVs	OSHA PELs	NOISHA RELs
<b>Alumina Oxide (Al<sub>2</sub>O<sub>3</sub>)</b>	10 mg/mg <sup>3</sup> (total)	15 mg/m <sup>3</sup> (total)	N/A
Cas # 1344-28-1		5 mg/m <sup>3</sup> (respirable)	

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.

	ACGIH-TLVs	OSHA PELs	NOISHA RELs
<b>Cobalt Oxide (Co<sub>3</sub>O<sub>4</sub>)</b>	0.02 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>	N/A
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 epidemiologis studies do not confirm an increased risk of cancer in humans except under common levels of exposure.

#### 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.

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	ACGIH-TLVs	OSHA PELs	NOISHA RELs
<b>Silica, Crystalline (SiO<sub>2</sub>)</b>	0.1 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>
Cas # 14808-60-7		SiO <sub>2</sub> + 2	

SYMPTOMS OF OVEREXPOSURE:

**Inhalation:**

- a) 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 associated with increased incidence of Sceroderma, an auto-immune disorder manifested by fibrosis (scarring) of the skin and internal organs.
- d) Thjere 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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	ACGIH-TLVs	OSHA PELs	NOISHA RELs
<b>Vanadium Oxide (VO<sub>3</sub>)</b>	0.05 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>
Cas # 1314-62-1			

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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	ACGIH-TLVs	OSHA PELs	NOISHA RELs
<b>Zinc Oxide (ZnO)</b>	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup> (total) 5 mg/m <sup>3</sup> (respirable)	5 mg/m <sup>3</sup>
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.

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	ACGIH-TLVs	OSHA PELs	NOISHA RELs
<b>Zirconium Oxide (ZrO)</b>	10 mg/m <sup>3</sup> (total) 5 mg/m <sup>3</sup> (Respirable)	15 mg/m <sup>3</sup> (total) 5 mg/m <sup>3</sup> (respirable)	5 mg/m <sup>3</sup> 15 min. C
Cas # 1314-24-4			

SYMPTOMS OF OVEREXPOSURE:

**Inhalation:** Acute inhalation to respirable dust which contains radioactive uranium, tohium 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 A 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 Limit.

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:

Odor: Odorless

Specific Gravity (water=1): N/A

Evaporation rate: None

% Volatile by volume: None

#### **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:

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 vacuum. 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 calcinations to form the finished product. Section 3, Hazardous ingredients Identity/Information, and Section 4, Symptoms of Overexposure, pertain to individual components. Section 5 through Section 10 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 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 CFR, Part 372.

**The information contained in this MSDS 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! MSDS'S ARE REQUIRED FOR FIRST SHIPMENT, AND WILL BE SENT AGAIN WHEN REVISED UPON YOUR NEXT ORDER OF PRODUCT OR BY REQUEST.**

**Disclaimer**