

# MATERIAL SAFETY DATA SHEET



Date Issued: 02/26/2007

MSDS No: 84

Revision No: New MSDS

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT CODE:** Bonstone Powdered Tint, Brown

### MANUFACTURER

Bonstone Materials Corporation  
707 Swan Drive  
Mukwonago WI 53149  
**Emergency Contact:** Mike Beckmann  
**Product Stewardship:** 262-363-9877

### 24 HR. EMERGENCY TELEPHONE NUMBERS

Chemtrec: 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### POTENTIAL HEALTH EFFECTS

**EYES:** Non-irritating to the eyes. Excessive exposure to airborne dust may reduce visibility and/or cause unpleasant deposits.

**SKIN:** Will not irritate skin and is not likely to cause allergic skin reaction. Irritation to skin or mucous membranes can occur by direct mechanical action or by rigorous cleaning necessary for removal of dust.

**INGESTION:** Small amount (less than 1 ounce/30 grams) swallowed is not likely to cause injury. If large amount ingested, may cause gastric irritation, nausea and diarrhea. Seek medical attention.

**INHALATION:** Not a hazard in normal industrial use. Wear a respirator and avoid breathing dust. As with all dusty materials, inhalation may cause respiratory irritation, sneezing, coughing, and runny nose.

### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**ACUTE TOXICITY:** Excessive exposure to airborne dust may reduce visibility and/or cause unpleasant deposits in the eyes, ears and nose. Irritation to skin or mucous membranes can occur by direct mechanical action or by rigorous skin cleaning necessary for removal of dust.

**CHRONIC EFFECTS:** Prolonged inhalation of amorphous silica may produce x-ray changes in the lungs without disability.

**CARCINOGENICITY:** IARC and NTP both contain listings for underground hematite mining. These listings are for the occupational exposures associated with the mining process which include radon, a known lung carcinogen. NIOSH in the Registry of Toxic Effects of Chemical Substances (RTECS) lists Iron Oxide as a suspect human carcinogen. However, the IARC reference to underground hematite mining is the source for this classification. Based on information currently available, this product is not considered a carcinogen.

**MEDICAL CONDITIONS AGGRAVATED:** Persons with existing pulmonary disorders must avoid breathing any dust generated during the use of this product.

**COMMENTS:** No chronic effects are known from repeated exposure to iron oxide PIGMENT. Prolonged inhalation (six to 10 years) of iron oxide FUME has been reported to produce changes in lung x-rays of exposed individuals. This condition, siderosis, is considered to be benign pneumoconiosis that exhibits no adverse health effects. Siderosis has been observed among occupations such as arc-welders where iron

oxide FUMES are present. To the best of our knowledge, this condition has not been observed after prolonged exposure to iron oxide PIGMENT. There is no Iron Oxide FUME contained in this product and none should be generated under normal use.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS	EINECS
Iron Oxide	10 - 90	001309-37-1	215-168-2
Iron Oxide	0 - 75	051274-00-1	- -
Iron Oxide	5 - 40	001317-61-9	- -
Silica, Amorphous	< 2 - 4	007631-86-9	231-545-4

### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

**SKIN:** Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

**INGESTION:** Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

### 5. FIRE FIGHTING MEASURES

**FLAMMABLE LIMITS:** 0 to 0

**GENERAL HAZARD:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**FIRE FIGHTING EQUIPMENT:** Firefighters and others who may be exposed to products of combustion should wear full firefighting turnout gear and self-contained breathing apparatus. Firefighting equipment should be thoroughly decontaminated after use.

### 6. ACCIDENTAL RELEASE MEASURES

**GENERAL PROCEDURES:** Vacuum or scoop material into an appropriately marked container for reuse or disposal. Avoid excessive generation of dust. It's more effective to clean this product while dry by vacuuming or sweeping. However, spill area can be washed with water. Collect wash water for approved disposal. Prevent runoff from entering storm sewers and ditches which lead to natural waterways.

**RELEASE NOTES:** Notify authorities if any exposures to the general public or environment occurs or is likely to occur.

**SPECIAL PROTECTIVE EQUIPMENT:** Remove contaminated clothing and wash before reuse.

### 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Minimize dust generation and accumulation.

**HANDLING:** Avoid breathing (dust, vapor, mist, gas).

**STORAGE:** Store in a tightly closed container.

**COMMENTS:** Follow all MSDS/label precautions even after container is emptied because they may retain product residues.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		SupplierOEL	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Iron Oxide	TWA				188		
	STEL	10					
Iron Oxide	TWA	10					
Silica, Amorphous	TWA	NL	6 mg/m <sup>3</sup>	NL	10 mg/m <sup>3</sup>	NL	NL
	STEL	NL	NL	NL	6 mg/m <sup>3</sup>	NL	NL

**ENGINEERING CONTROLS:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

**SKIN:** Wash thoroughly after handling.

**RESPIRATORY:** A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**WORK HYGIENIC PRACTICES:** Provide readily accessible eyewash stations and safety showers. Wash at the end of each work shift and before eating, smoking, or using the toilet.

**COMMENTS:** Avoid breathing any (dust, vapor, mist, gas) that may be generated when grinding cured material.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	Freezing Point (°C)	Specific Gravity
Iron Oxide	1000	4.75
Iron Oxide	1000	4.4

**PHYSICAL STATE:** Solid

**APPEARANCE:** Gritty powder of various colors, earthen odor

**COLOR:** Brown

**pH:** 5 to 9

**PERCENT VOLATILE:** 0

**SOLUBILITY IN WATER:** Insoluble

**SPECIFIC GRAVITY:** 4.400 to 5

## 10. STABILITY AND REACTIVITY

**STABILITY:** Stable.

**POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** Heat, fire, severe oxidizing conditions, and/or excessive moisture.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

Chemical Name	ORAL LD <sub>50</sub> (rat)
Iron Oxide	> 5000 mg/l (rat)
Iron Oxide	> 5000 mg/l (rat)

### DERMAL LD<sub>50</sub>:

**Notes:** Not Established

### ORAL LD<sub>50</sub>:

> 5000 mg/l (rats)  
**Notes:** Non-irritating. The oral LD50 for rats is greater than 5000 mg per liter.

### INHALATION LC<sub>50</sub>:

Not Established

### CARCINOGENICITY

**IARC:** Suspect cancer hazard.

**Notes:** The IARC monograph on underground hematite mining (1972) states, "No carcinogenic effects were observed in mice, hamsters, or guinea pigs given ferric oxide intratracheally."

## 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** Fish toxicity: Golden Orfe (*Leuciscus idus*) LCo greater than 1000 mg per liter.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Recover, reclaim or recycle when practical. Dispose of in accordance with federal, state and local regulations. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements be be more restrictive or otherwise different from federal laws and regulations.

## 14. TRANSPORT INFORMATION

### DOT (DEPARTMENT OF TRANSPORTATION)

**OTHER SHIPPING INFORMATION:** Not regulated by DOT

## 15. REGULATORY INFORMATION

### UNITED STATES

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)****311/312 HAZARD CATEGORIES:** Delayed health hazard.**TSCA (TOXIC SUBSTANCE CONTROL ACT)****TSCA STATUS:** This product and/or all of it's components is/are listed on the TSCA Inventory.**STATES WITH SPECIAL REQUIREMENTS**

Chemical Name	Requirements
Iron Oxide	PA, NJ, MA: Iron (III) Oxide is on the Right-to-Know list for these states.
Iron Oxide	NJ, PA: Iron Oxide Yellow is on the Right-to-Know list for these states.
Iron Oxide	NJ, PA: Black Iron Oxide is on the Right-to-Know list for these states.
Silica, Amorphous	MA, NJ, PA: Amorphous Silica is on the Right-to-Know list for these states.

**CALIFORNIA PROPOSITION 65**

Chemical Name	Wt.%	Listed
Iron Oxide	10 - 90	● Cancer
Iron Oxide	5 - 40	● Cancer

**16. OTHER INFORMATION****REASON FOR ISSUE:** New MSDS format**APPROVED BY:** Mike Beckmann    **TITLE:** President**INFORMATION CONTACT:** Mike Beckmann**REVISION SUMMARY:** New MSDS

**MANUFACTURER DISCLAIMER:** The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or any process, unless specified in the text.