

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** Powdered Pigments  
 (Applies to all colors with the exception of carbon black)  
**General Use:** colorant  
**Product Description:** dry powder

### MANUFACTURER

Prism Pigments  
 1251 Arundel St  
 St Paul, MN 55117

### EMERGENCY TELEPHONE NUMBER:

1-800-424-9300 CHEMTREC

## 2. HAZARD IDENTIFICATION

### OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

Component	EXPOSURE LIMITS 8 hrs TWA (ppm)		
	OSHA PEL	ACGIH TLV	NIOSH REL
Iron Oxide	10 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Amorphous Silica	(80 mg/m <sup>3</sup> )/%SiO <sub>2</sub>	NE	NE
Crystalline Silica	0.025 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>
Aluminum oxide	5 mg/m <sup>3</sup> (respir)	NE	NE
Calcium Carbonate	5 mg/m <sup>3</sup> (respir)	NE	5 mg/m <sup>3</sup> (respir)
Calcium oxide	5 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>
Magnesium oxide	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	NE
Aluminum	5 mg/m <sup>3</sup> (respir)	1 mg/m <sup>3</sup> (respir)	5 mg/m <sup>3</sup> (respir)
Manganese oxide	5 mg/m <sup>3</sup>	0.02 mg/m <sup>3</sup> (respir)	1 mg/m <sup>3</sup>
Titanium dioxide	15 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>	NE
Manganese	5 mg/m <sup>3</sup>	0.02 mg/m <sup>3</sup> (respir)	1 mg/m <sup>3</sup>
Manganese ferrite spinel	5 mg/m <sup>3</sup>	0.02 mg/m <sup>3</sup> (respir)	1 mg/m <sup>3</sup>
1-methyl-2-pyrrolidone	NE	NE	NE
Chromium oxide III	0.5 mg/m <sup>3</sup> (as Cr)	0.5 mg/m <sup>3</sup> (as Cr)	0.5 mg/m <sup>3</sup> (as Cr)
Chromium oxide VI	0.005 mg/m <sup>3</sup> (as Cr)	0.005 mg/m <sup>3</sup> (as Cr)	0.001 mg/m <sup>3</sup> (as Cr)
Cobalt chromite blue green spinel	0.1 mg/m <sup>3</sup>	0.02 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>
Cobalt chromite blue spinel	0.1 mg/m <sup>3</sup>	0.02 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>

### EMERGENCY OVERVIEW

#### GHS CLASSIFICATION OF SUBSTANCE

<b>Flammable Liquid</b>	Not Applicable
<b>Aspiration Toxicity</b>	Not Applicable
<b>Skin Irritation</b>	No Classification Under GHS
<b>Eye Irritation</b>	No Classification Under GHS
<b>Carcinogenicity</b>	Crystalline silica is a Class I Carcinogen
<b>Specific Organ Toxicity Repeated Exp.</b>	STOT RE Category 1
<b>Specific Organ Toxicity Single Exp.</b>	No Classification Under GHS
<b>Reproductive Toxicity</b>	No Classification Under GHS
<b>Acute Toxicity</b>	No Classification Under GHS
<b>Germ Cell mutagenicity</b>	No Classification Under GHS
<b>Hazardous to the aquatic env.</b>	No Classification Under GHS

## GHS LABEL ELEMENTS



**DANGER** - contains crystalline silica as a component in some pigments. Crystalline silica is a known human carcinogen via respiratory route.

### Hazard Statements:

H350 - May cause cancer (inhalation of dust)  
H372 - Causes damage to the lungs through prolonged and repeated exposure to dust.

### Precautionary Statements

#### General:

P101 - If medical advice is needed, have product container or label at hand.  
P102 - Keep out of reach of children.  
P103 - Read label before use.

#### Prevention:

P280 - Wear protective gloves when handling the product.

#### Response:

P302+352 - If on skin: wash with plenty of water.  
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
P337+P313- If eye irritation persists: Get medical advice/attention  
P333+P313- If skin irritation or rash occurs: Get medical advice/attention.

### Storage/Disposal:

None Applicable

### UN GHS

**ACCORDING TO THE GLOBALLY HARMONIZED STANDARD FOR CLASSIFICATION AND LABELING (GHS) THIS PRODUCT IS CONSIDERED HAZARDOUS BASED ON CRYSTALLINE SILICA CONTENT**

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>wt %</u>	<u>CAS Registry #</u>
Iron Oxide	0 - 100	mixed
Amorphous Silica	0 - 5	7631-86-9
Crystalline Silica	0 - 4	14808-60-7
Aluminum oxide	0 - 5	1344-28-1
Calcium Carbonate	0 - 100	1317-65-3
Calcium oxide	0 - 6	1305-78-7
Magnesium oxide	0 - 3	1309-48-4
Aluminum	0 - 3	7429-90-3
Manganese oxide	0 - 5	1313-13-9
Titanium dioxide	0 - 100	13463-67-7
Manganese	0 - 5	7439-96-5
Manganese ferrite spinel	0 - 100	68186-94-7
1-methyl-2-pyrrolidone	0 - <3	872-50-4
Chromium oxide III	0 - 100	1308-38-9
Chromium oxide VI	0 - < 50 ppm*	13530-68-2
Cobalt chromite blue green spinel	0 - 100	68187-11-1
Cobalt chromite blue spinel	0 - 100	1345-16-0

\* - exists only as a contaminant in the Chromium oxide III

## 4. FIRST AID MEASURES

### INHALATION:

Move person to fresh air. If respiratory irritation persists, seek medical attention.

**EYE CONTACT:**

Remove contact lens (if present). Rinse eyes immediately with plenty of clean water for at least 15 minutes. Flush under eyelids. If eye irritation persists, seek medical attention.

**SKIN CONTACT:**

In case of skin contact, immediately rinse skin with plenty of water. May be irritating to skin if left in contact with skin for prolonged periods.

**INGESTION:**

If ingested in any significant quantity, do not induce vomiting unless directed to do so by medical personnel. Get immediate medical attention providing safety data sheet to medical personnel. Not a likely route of exposure under normal usage.

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**5. FIRE FIGHTING MEASURES**

**Flashpoint and Method:** Not Applicable

**Flammable Limits:** Not Applicable

**Autoignition Temperature:** Not Applicable

**GENERAL HAZARD:**

Pigments are various metals and metal oxides depending on color. Product is not flammable.

**FIRE FIGHTING INSTRUCTIONS:**

Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC).

**FIRE FIGHTING EQUIPMENT:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. For small outdoor fires, which may be easily extinguished with a portable fire extinguisher, use of SCBA may not be required.

**FURTHER INFORMATION:**

Pigment may auto-oxidize if exposed to temperatures exceeding 176 degrees Fahrenheit which generates heat and may ignite surrounding combustibles.

**HAZARDOUS COMBUSTION PRODUCTS:**

None

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**6. ACCIDENTAL RELEASE MEASURES**

**LAND SPILL RESPONSE:**

Vacuum or scoop material into a suitably marked container for disposal. Spill area can be washed with water but collect water waste and do not allow to run off into waterways.

**WATER SPILL:**

Most pigment components are not soluble in water. Spills are not expected to be sufficiently large to require removal from a water body. Small spills will disperse to the bottom.

**RECOMMENDED DISPOSAL:**

Material that cannot be re-used should be disposed in accordance with federal, state, and local environmental control regulations at a site permitted to accept the waste. Verify waste materials do not exceed the EP toxicity criteria (40CFR 261.20-24) prior to disposal as a non-hazardous waste. If classified as a hazardous waste, dispose of accordingly.

## 7. HANDLING AND STORAGE

**STORAGE TEMPERATURE:** Ambient

**STORAGE PRESSURE:** Atmospheric

**GENERAL:**

Store in original container at ambient temperature in a dry location. Store out of direct sunlight. Protect package against physical damage.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)**

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**ENGINEERING CONTROLS:**

Standard engineering controls such as eye wash station and general ventilation in the work area.

**PERSONAL PROTECTION:**

**Eyes:**

Wear safety glasses. Maintain eye wash station in the immediate work area if using quantities of material over time.

**Skin:**

Wear normal work clothing including long pants, long-sleeved shirts, and foot covering to prevent direct contact of the product with the skin. Wear resistant gloves (nitrile or more protective) when working with product.

**Respiratory:**

Wear respiratory protection suitable for nuisance dust when working with the product and dust is expected to be generated.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Vapor Pressure:</b>	NA	<b>Vapor Density:</b>	NA
<b>Specific Gravity:</b>	3.5 - 5.5	<b>Evaporation Rate:</b>	NA
<b>Solubility in Water:</b>	insoluble	<b>Freezing Point:</b>	NA
<b>pH:</b>	neutral	<b>Odor:</b>	not appreciable
<b>Boiling Point:</b>	NA	<b>Appearance:</b>	colored granules
<b>Viscosity:</b>	NA	<b>Physical State:</b>	solid
<b>Flash Point:</b>	NA	<b>Flammable Range:</b>	NA

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## 10. STABILITY AND REACTIVITY

### GENERAL:

Stable

### INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Iron oxide pigments become unstable at temperatures greater than 176 F and can slowly auto-oxidize into Fe<sub>2</sub>O<sub>3</sub> which generates additional heat. Under certain conditions this heat may be sufficient to cause combustible materials to ignite.

### HAZARDOUS DECOMPOSITION:

None listed.

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## 11. TOXICOLOGICAL INFORMATION

### TOXICITY TO ANIMALS:

<u>Component</u>	<u>Acute Test</u>	<u>Value</u>	<u>Species</u>
Iron Oxide III	LD50	>5000 mg/kg	Rat
Iron Oxide Black	LD50	>2000 mg/kg	Rat
Aluminum Oxide	LD50	>5000 mg/kg	Rat
Amorphous Silica	LD50	>5000 mg/kg	Rat
Manganese Ferrite Spinel	LD50	5000 mg/kg	Rat
Chrome III Oxide	LD50	>10000 mg/kg	Rat
Iron III Oxide	LC50 inhalation	>210 mg/m <sup>3</sup>	Rat
Red Iron Oxide	LD50 dermal	5500 mg/kg	Rat
calcium carbonate	LD50-oral	6450 mg/kg	Rat

### ROUTES OF ENTRY:

Inhalation of airborne dust and accidental ingestion of large quantities of the pigment blends. Skin contact with the pigment blends.

### CHRONIC EFFECTS ON HUMANS:

#### Eyes:

Dust may cause mechanical eye irritation.

#### Skin:

Dust may cause mechanical skin irritation. Metal oxides and chromium III oxide can cause contact dermatitis

#### Ingestion:

Iron content is of importance by ingestion exposure route. Seek medical attention if quantities are ingested by animals or humans and identify iron component of the product.

#### Inhalation:

Long term exposure to iron fume which is different than this material has been associated with lung x-ray changes known as siderosis. The iron oxides in the pigment blends are not the same as iron fume and this condition is not expected to occur.

## 12. ECOLOGICAL INFORMATION

<u>Species</u>	<u>Test Information</u>	<u>Concentration</u>	<u>Component</u>
Leuciscus idus	LCo	>1000 mg/L	Chromium III Oxide
Pseudomonas Fluoresceus	No harmful effects	10,000 mg/L	Chromium III Oxide
Leuciscus idus	LCo	>1000 mg/L	Red Iron Oxide
Pseudomonas Fluoresceus	ECO	>5000 mg/L	Red Iron Oxide
Leuciscus idus	LCo 48 hrs	>1000 mg/L	Red Iron and Black Iron oxide mix
Leuciscus idus	LCo	>1000 mg/L	Iron oxide

### PRODUCTS OF BIODEGRADATION:

Pigment products are primarily metallic oxides with limited solubility. Breakdown is expected to produce essential growth elements of iron, chromium, etc.

## 13. DISPOSAL CONSIDERATIONS

Depending on the pigment, chromium levels may exceed the U.S. EPA 40 CFR 261.20-24 EP toxicity limits for total chromium. Perform an EP TCLP prior to disposing of any waste material to determine whether the product should be classified as a hazardous waste.

## 14. TRANSPORT INFORMATION

The following proper shipping name, hazard class and packing group are in accordance to transportation regulations.

<u>Mode of Transportation</u>	<u>Domestic Surface (USDOT)</u>	<u>Domestic Air</u>	<u>International Air (IATA)</u>
UN Number	Not Regulated	Not Regulated	Not Regulated
Proper Shipping Name			
Hazard Class			
Packing Group			
Hazard Label			
Handling Label(s)			
ERG#:			
Packaging Instructions:			

## 15. REGULATORY INFORMATION

### Chemical Inventory Status

Ingredients listed on TSCA, DSL, Japan, and EC inventories

SARA Section 302 - Emergency Planning Notification -	None
SARA Section 304 - Emergency Release Notification.	None
SARA 311/312 - Hazard categories for SARA Section 311/312 Reporting:	None
CERCLA - Hazardous Substance -	None
RCRA Hazardous Waste Classification -	Verify chromium content

### California Proposition 65:

Components in pigment blends on the list include: crystalline silica, 1-methyl-2-pyrrolidone, and hexavalent chromium (present only as a contaminant in some pigments).

## 16. OTHER INFORMATION

### NATIONAL FIRE PROTECTION ASSOCIATION

Health: 1  
Fire: 0  
Reactivity: 0

#### CREATION/REVISION SUMMARY:

Created on 9-Jul-15

Cheryl Sykora, CIH, CSP,CHMM  
Registered Specialist, SDS and Label Authoring #118534  
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