

SAFETY DATA SHEET

Section 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Name: Rainbow Cement Red
Product Form: Mixture
1.2 Product Use: Pigments for Cement and Gypsum Products
1.3 Supplier/Manufacturer: Empire Blended Products Inc.
250 Hickory Lane
Bayville, NJ 08721
Phone Number: (732) 269-4949
1.4 Emergency Number: CHEMTREC (800) 424-9300

Section 2: HAZARDS IDENTIFICATION

2.1 Classification of the Chemical:

Hazard Class:

Skin Irritation/Corrosion	2
Serious Eye Damage/Irritation	2A
Carcinogenicity	1A
Specific target organ toxicity -	Single exposure 1
Specific target organ toxicity -	Repeated exposure 2

2.2 Label Elements:

Hazard Pictogram:



Signal Word:

Danger

Hazard Statement:

Causes serious eye irritation. Causes skin irritation. May cause cancer. Causes damage to organs (lungs). May cause damage to organs through prolonged or repeated exposure (lungs).

Prevention:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves and eye/face protection. Do not breathe dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Do not taste or swallow.

Response:

If on Skin: Wash with plenty of soap and water. Take off contaminated clothing/ wash contaminated clothing before reuse.
If in Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

Storage:

Store locked up. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink.

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Disposal: Dispose of contents and container in accordance with all local, regional, national, and international regulations.

2.3 Additional Information:

Hazards not otherwise classified: Corrosive to digestive tract. Causes digestive tract burns.
100% of the mixture consists of ingredient(s) of unknown toxicity.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Mixtures:

Ingredient	CAS #	Wt. %
Dolomite	16389-88-1	<11 %
Mica	12001-26-2	<10 %
Crystalline Quartz Silica	14808-60-7	<4 %
Aluminum Oxide	1344-28-1	3-5 %
Calcium Oxide	1305-78-8	<2 %
Magnesium Oxide	1309-48-4	1-3 %

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section. Occupational exposure limits, if available, are listed in section 8.

Section 4: FIRST AID MEASURES

4.1 Description of First Aid Measures:

- Eye:** In case of contact, check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. In case of contact, flush eyes with plenty of water for at least 20 minutes. Use fingers to ensure that eyelids are separated and that the eye is being irrigated.
- Skin:** In case of contact, flush contaminated skin with plenty of water for at least 20 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If not breathing, if breathing is irregular or respiratory arrest occurs, provide artificial respiration, or oxygen by a trained professional, using a pocket type respirator.
- Ingestion:** Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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4.2 Most Important Symptoms and Effects, both Acute and Delayed:

- Eye:** Causes serious eye irritation. Causes irritation with symptoms of reddening, tearing, stinging, and swelling. Corrosive symptoms of reddening, tearing, swelling, burning and possible permanent damage.
- Skin:** Causes skin irritation with symptoms of reddening, itching, and swelling.
- Inhalation:** May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to Silica, Quartz can cause a very serious lung disease called Silicosis with symptoms of coughing, wheezing, fatigue, loss of appetite, fever, shortness of breath, and changes in chest x-ray.
- Ingestion:** Corrosive to the digestive tract. Causes burns, irritating to mouth, throat and stomach. Corrosive symptoms of coughing, burning, ulceration, and pain. Symptoms of irritation may include abdominal pain, nausea, vomiting, and diarrhea.

4.3 Indication of Any Immediate Medical Attention and Special Treatments Needed:

- Note to Physicians:** Treat symptomatically. No specific treatment.
- Specific Treatments:** No special measures required

Section 5: FIRE FIGHTING MEASURES

5.1 Extinguishing Media:

Suitable Extinguishing Media: Use an extinguishing agent suitable for the surrounding fire. In case of fire, use water spray (fog), foam or dry chemical.

Unsuitable Extinguishing Media: None known.

5.2 Special Hazards Arising From the Chemical: No specific fire or explosion hazard.

Products of Decomposition: Decomposition products may include the following materials: carbon dioxide, carbon monoxide, metal oxide/oxides.

5.3 Special Protective Equipment and Precautions for Fire Fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

6.2 Environmental Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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6.3 Methods and Materials for Containment/Cleanup: Move containers from spill area. Approach release from upwind. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal. Prevent entry into sewers, water courses, basements or confined areas.

Section 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling: Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Use only with adequate ventilation. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking and smoking. Put on appropriate personal protection equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

7.2 Conditions for Safe Storage, Including Any Incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Empty containers retain product residue and can be hazardous. Do not reuse container.

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control Parameters:

Exposure Guidelines:

Ingredient	ACHIG TLV - TWA	OSHA PEL - TWA
Mica	3 mg/m ³ 8 hours (respirable fraction)	20 mppcf 8 hours
Crystalline Quartz Silica	0.025 mg/m ³ 8 hours (respirable fraction)	250 mppcf / (%SiO ₂ +5) 8 hours 10 mg/m ³ / (%SiO ₂ +2) 8 hours
Aluminum Oxide	1 mg/m ³ 8 hours (respirable fraction)	5 mg/m ³ 8 hours (respirable fraction) 15 mg/m ³ 8 hours (total dust)
Calcium Oxide	2 mg/m ³ 8 hours	5 mg/m ³ 8 hours
Magnesium Oxide	10 mg/m ³ 8 hours (inhalable fraction)	15 mg/m ³ 8 hours (total particulates)

If this product contains ingredient with exposure limits, personal, workplace, atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

8.2 Exposure Controls:

Engineering Controls: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminate below any recommended or statutory limits.

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8.3 Individual Protective Measures:

Personal Protective Equipment:

Eye/Face Protection: Protective goggles with side shield or tightly fitting protective goggles.

Skin Protection: Permeation resistant clothing and foot protection. Chemical-resistant gloves.

Respiratory Protection: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. The following respirator is recommended if airborne concentrations exceed the appropriate standard/guideline. NIOSH approved, air-purifying particulate respirator with N-95 filters.

General Hygiene Considerations: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reuse. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties:

Appearance: Powder

Color: Red

Odor: Odorless

Odor Threshold: N/A

Physical State: Solid

pH: N/A

Viscosity: N/A

Freezing Point: N/A

Boiling Point: N/A

Melting Point: 1000 °C (1832 °F)

Flash Point: N/A

Evaporation Rate: N/A

Lower Flammability Limit: N/A

Vapor Pressure: N/A

Vapor Density: N/A

Relative Density: 4 to 5

Bulk Density: 300 to 1000 kg/m³

Lower Explosion Limit: N/A

Upper Explosion Limit: N/A

Solubility in Water: Insoluble in cold water

Coefficient of Water/Oil Distribution: N/A

Auto-ignition Temperature: N/A

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Decomposition Temperature: N/A

Section 10: STABILITY AND REACTIVITY

- 10.1 Reactivity:** No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical Stability:** This product is stable.
- 10.3 Possibility of Hazardous Reactions:** No hazardous reactions known under conditions of normal storage and use.
- 10.4 Conditions to Avoid:** No specific data.
- 10.5 Incompatible Materials:** No specific data.
- 10.6 Hazardous Decomposition Products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Likely routes of exposure: Skin contact, eye contact, inhalation, and ingestion.

Eye: Causes irritation with symptoms of reddening, tearing, stinging, and swelling. Corrosive with symptoms of reddening, tearing, swelling, burning, and possible permanent damage.

Skin: Causes irritation with symptoms of reddening, itching, and swelling.

Inhalation: The symptoms of silicosis may include shortness of breath, coughing, wheezing, fatigue, chest pain, loss of appetite, and fever.

Ingestion: Corrosive with symptoms of coughing, burning, ulceration, and pain. May cause irritation with symptoms that include abdominal pain, nausea, vomiting, and diarrhea.

Acute Toxicity:

<u>Ingredient</u>	<u>LD50- Oral</u>
Dolomite	6450 mg/kg, rat
Mica	>15000 mg/kg
Aluminum Oxide	>5000 mg/kg, rat
Magnesium Oxide	>5000 mg/kg, rat

11.2 Delayed, Immediate and Chronic Effects of Short- and Long- Term Exposure:

Short Term Exposure: N/A

Long Term Exposure:

Potential Delayed Effects – N/A

General – May cause damage to organs through prolonged or repeated exposure. Excessive exposure to airborne crystalline silica can cause fibrotic lung damage, with scarring of the lungs with cough and shortness of breath. This is called "Silicosis". This is generally a slowly developing fibrotic disease as symptoms are usually delayed for 10 years or more. Symptoms are dyspnea, chest pain, breathlessness, and cough. The chronic lung scarring developed from the silica dust causes a progressive massive fibrosis. This may lead to increased susceptibility to tuberculosis. Suspected of causing cancer.

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Carcinogenicity – May cause cancer. Risk of cancer depends on duration and level of exposure.

Ingredient	IARC	NTP	OSHA
Crystalline Quartz Silica	1 – Carcinogen to humans	Proven	N/A
Dolomite	N/A	N/A	N/A
Mica	N/A	N/A	N/A
Aluminum Oxide	N/A	N/A	N/A
Calcium Oxide	N/A	N/A	N/A
Magnesium Oxide	N/A	N/A	N/A

Mutagenicity – No known significant effects or critical hazards.

Teratogenicity – No known significant effects or critical hazards.

Developmental Effects – No known significant effects or critical hazards.

Fertility Effects – No known significant effects or critical hazards.

Skin Irritation/Corrosion – Calcium Oxide = Corrosive. Magnesium Oxide = Slight Irritant.

Eye Irritation/Corrosion – Dolomite = Slight Irritant. Calcium Oxide = Severe Irritant.

Magnesium Oxide = Slight Irritant.

STOT Single Exposure –

Ingredient	Category	Target Organs
Crystalline Quartz Silica	3	Respiratory Tract Irritation
Aluminum Oxide	3	Respiratory Tract Irritation
Calcium Oxide	1	Lungs
Magnesium Oxide	3	Respiratory Tract Irritation

STOT Repeated Exposure –

Ingredient	Category	Route of Exposure	Target Organs
Dolomite	2	Not determined	Lungs
Mica	2	Inhalation	Lungs
Aluminum Oxide	2	Inhalation	Lungs

Section 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

Ingredient Name	Result	Species	Exposure
Calcium Oxide	Acute EC50 159.6 mg/l	Daphnia	24 hours
	Acute LC50 1070 mg/l	Fish	96 hours
Aluminum Oxide	Acute EC50 >100 mg/l	Algae	72 hours
	Acute EC50 >100 mg/l	Daphnia	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours

12.2 Persistence and Degradability:

Dolomite = Readily Biodegradable

Aluminum Oxide = Readily Biodegradable

12.3 Bioaccumulative Potential: N/A

12.4 Mobility in Soil: N/A

12.5 Other Adverse Effects: No known significant effects or critical hazards.

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Section 13: DIPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:

Disposal Method: The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Waste disposal should be in accordance with existing federal state, provincial and or local environmental control laws.

RCRA Classification: If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24).

Section 14: TRANSPORTATION INFORMATION

14.1 DOT (US): Not regulated

14.2 IMDG: Not regulated

14.3 IATA: Not regulated

Section 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislations Specific for the Chemical:

SARA 311/312: Immediate (acute) health hazard. Delayed (chronic) health hazard.

SARA Title III Section 302: None

SARA Title III Section 313: Aluminum Oxide (CAS# 1344-28-1) Concentration = 3-5%

US EPA CERCLA: None

US Toxic Substance Control Act: Listed on the TSCA Inventory

STATE REGULATIONS:

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections on the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

Ingredient	CAS#	State Code	Concentration (%)
Mica	12001-26-2	MA- S, NJ- HS, PA- RTK HS	<10 %
Crystalline Quartz Silica	14808-60-7	MA- S, NJ- HS, PA- RTK HS	<4 %
Aluminum Oxide	1344-28-1	MA- S, NJ- HS, PA- RTK HS	3-5 %
Calcium Oxide	1305-78-8	MA- S, NJ- HS, PA- RTK HS	<2 %
Magnesium Oxide	1309-48-4	MA- S, NJ- HS, PA- RTK HS	1-3 %
Hematite	1317-60-8		95-100 %
Dolomite	16389-88-1		<11 %

Massachusetts Substances: MA- S

Massachusetts Extraordinary Hazardous Substances: MA- Extra HS

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New Jersey Hazardous Substances: NJ- HS
Pennsylvania RTK Hazardous Substances: PA- RTK HS
Pennsylvania Special Hazardous Substances: PA- Special HS

California Prop. 65: Warning! This product contains chemicals known to the State of California to cause cancer: Crystalline Quartz Silica and Titanium Dioxide

HMIS- Hazardous Material Information System:

Health: 3
Flammability: 0
Physical: 0

NFPA- National Fire Protection Association:

Health: 3
Fire: 0
Reactivity: 0

Hazard Rating:

0 = minimal 1 = slight 2 = moderate 3 = severe 4 = extreme

Section 16: OTHER INFORMATION

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