

Material Safety Data Sheet

HMIS

Health Hazard	1*
Fire Hazard	2
Reactivity	0

*Indicates a chronic health hazard.

1 Product & Company Identification

Manufacturer's Name: Alsey Refractories Company
 Highway 106
 Alsey, IL 62610
 Phone: 314-963-7900

Product Name: Espresso & Creamer
 Product Type: Firebrick Stain & Color Enhancer

2 Hazards Identification

Potential Health Effects	Acute	Chronic
Eyes	Eye watering, irritation and reddening from exposure.	
Skin	Skin may experience some irritation with repeated and prolonged exposure. <u>CHROMIUM (III)-DUST</u> : This compound does not appear to cause other effects associated with the hexavalent chromium.	May develop skin allergy from long and repeated skin contact.
Inhalation	Inhalation of spray mist may irritate nasal passages. <u>CHROMIUM (III)-DUST</u> : These compounds can cause serious pulmonary disease. <u>MANGANESE COMPOUNDS</u> : There has been found an association between manganese exposure and pulmonary effects including pneumonia, chronic bronchitis and airway disability. <u>COLLOIDAL SILICA</u> : May cause irritation to the respiratory tract and lungs if dust is inhaled.	<u>MANGANESE COMPOUNDS</u> : None known at this time; however, manganese can cause a neurological disorder known as manganism. This disease begins with headaches, irritability and occasionally, psychotic behavior. <u>COLLOIDAL SILICA</u> : Prolonged inhalation of dust can cause pneumconiosis.
Ingestion	Ingestion may result in stomach pain or nausea.	

***Note: This product is a blend of materials which has not been tested as a mixture. The health effect data is based on the individual components.

Carcinogenicity: NTP CARCINOGEN: No IARC MONOGRAPHS: No OSHA REGULATED: No. Not known to contain any ingredients recognized as carcinogens by the National Toxicology Program (NTP), the International Agency for Cancer Research (IARC) or the Occupational Safety and Health Administration (OSHA).

Medical Conditions Generally Aggravated by Exposure:
CHROMIUM (III)-DUST: Skin (dermal) reactions due to hypersensitivity.
MANGANESE COMPOUNDS: Inhalation of dust by persons with pulmonary (lung) function problems will probably worsen their respiratory condition.
COLLOIDAL SILICA: Prolonged inhalation of dust can increase lung injury in individuals with emphysema, asthma or other lung disorders.

3 Composition/Information of Ingredients

Name	CAS-No	Weight %
Chromium (III) Oxide	001308-38-9	1-10
Iron Oxide	001309-37-1	5-15
Colloidal Silica	007631-86-9	5-15
Manganese Dioxide	001313-13-9	1-10

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4 First Aid Measures

- Eye Contact: Immediately flush with large quantities of fresh water for 15 minutes, lifting the upper and lower eyelids occasionally. Get immediate medical attention.
- Skin Contact: Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. Get medical attention immediately if irritation persists after washing.
- Ingestion: Keep calm and quiet. Get medical attention immediately.
- Inhalation: Move to fresh air.

5 Fire Fighting Measures

- Extinguishing Media: Foam, Alcohol Foam, CO₂, Dry Chemical, Water fog
- Precautions for Firefighters: Hazardous decomposition products may form from incomplete combustion. Wear full protection gear with self-contained positive pressure breathing apparatus. Use water spray to cool nearby containers and structures exposed to fire.
- Unusual Fire & Explosion Hazards: Closed containers can build pressure from heat and rupture violently. Keep cool with water. Product will not burn but may spatter if temperature exceeds boiling point of water. Dried solids can burn giving off hazardous decomposition products. After water evaporates, remaining materials may burn.

6 Accidental Release Measures

- Small/Large Spill: Use absorbent material to collect spill. Scoop into container and dispose according to local regulations.
- Methods for Clean Up: In the event of a large transportation related spill or emergency call CHEMTREC AT 1-800-424-9300.

7 Handling and Storage

- Handling: Freezing temperatures may affect product stability. Store in a cool, dry, well ventilated place away from incompatible materials. Keep container tightly closed when not in use. Do not use pressure to empty container. Wash thoroughly after handling. Do not get in/on eyes, skin or clothing.
- Storage: Containers, even those that have been emptied, will retain product residue and vapors. Always obey hazard warning and handle empty containers as if they were full.

8 Exposure Controls and Personal Protection

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL
Chromium (III) Oxide	.5mg/m ³	.5mg/m ³
Iron Oxide	10mg/m ³ total dust, 5mg/m ³ (fume)	10mg/m ³ total dust, 5mg/m ³ (fume)
Colloidal Silica	10mg/m ³ total dust	6mg/m ³
Manganese Dioxide	5mg/m ³	5mg/m ³

- Engineering Measures: Good general ventilation should be sufficient for most conditions. Use local exhaust if necessary to control mist or vapor.
- Eye/Face Protection: Wear splash goggles or approved safety glasses. Do not wear contact lenses when working with chemicals. Contact lenses can trap chemical next to eye which may increase eye damage.
- Skin and Body Protection: Use gloves impervious to liquid.
- Respiratory Protection: Use NIOSH approved respirator in poorly ventilated areas.
- Other Protective: An eye wash station and emergency shower should be available in case of emergency.
- Work/Hygienic Practices: In handling any chemicals, personal hygiene is extremely important. Always wash your hands and face before eating or when done handling or using this product. Keep food and drink out of work areas.

9 Physical and Chemical Properties

- Physical State: Liquid Odor: Mild Water Solubility: Soluble Flash Point: n/a
- Boiling Point/Range: 212°F Density: 10.23lb/gl Specific Gravity: 1.23 (H₂O=1)
- Vapor Density: Heavier than air Evaporation Rate: Slower than ether
- Flammable Limits in Air by Volume: Lower: n/a Upper: n/a
- VOC as Supplied: 0.0lb/gl 0g/l VOC Excluding EPA Exempt Solvents/Water: 0.0lb/gl 0g/l
- Check with your state/local Air Quality regulatory agency to determine which VOC Calculation you should use.

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10 Stability and Reactivity

Stability: Stable
 Incompatible Products: Strong oxidizing agents
 Conditions to Avoid: None known
 Hazard Byproducts: Carbon monoxide, carbon dioxide, may yield acrylic monomers. Hazardous polymerization will not occur.

11 Toxicological Information

See sections 2, 4, 8.

12 Ecological Information

Ecotoxicological/chemical fate information: not available

13 Disposal Considerations

Disposal of Product: Not a RCRA hazardous waste. Dispose of waste according to Federal, State, and local regulations. Note: Industrial paint wastes that do not fall under RCRA are usually considered Special Wastes by local landfills. Contact your local landfill for disposal methods.
 Packaging Disposal: Do not put used container into incinerator, wood stove, or home trash compactor.

14 Transport Information

U.S.A. DOT: (Ground): Not regulated
 (Limited Quantities/Ground): Not regulated
 IATA Shipping Description (Air): Not regulated
 IMDG Shipping Description (Waterways): Not regulated

15 Regulatory Information

OSHA Classification: Not regulated
 Clean Air Act: Ozone Depleting Chemicals: Not known to contain or be manufactured with Class 1 or Class 2 Ozone Depleting Chemicals (ODC's)
 RoHS Directive: This product complies with the RoHS (Regulation of Hazardous Substances) Directive.

U.S. Federal Regulations

SARA 313/40 CFR 372:

CHROMIUM (III) OXIDE	001308-38-9	4% / WT
MANGANESE DIOXIDE	001313-13-9	3% / WT

Clean Air Act Amendment Section 112 (HAPS):

CHROMIUM (III) OXIDE*	001308-38-9	4% / WT
MANGANESE DIOXIDE*	001313-13-9	3% / WT

* Indicates non-volatile Hazardous Air Pollutant chemicals at or above the reporting requirements of the Clean Air Act Amendments Section 112.

16 Other Information

MSDS Status: Replaces all prior MSDS.

Note: This material safety data sheet contains confidential proprietary information and is not to be disclosed to the general public or to competition except as required by law. The information accumulated herein is believed to be accurate but is not warranted to be, whether originating with Alsey Refractories Co. or not. This information is offered solely for use in your evaluation of this product in respect to safety, health, and environmental hazards.

End of MSDS