SJ Environmental Corp

SECTION 1: PRODUCT IDENTIFICATION

Product identifier

Product Name: BRIMSORB - SX
Relevant identified uses of the substance or mixture and uses advised against Identified uses: H2S removal
Details of the manufacturer of the safety data sheet

Manufacturer: SJ Environmental Corp.
Address: 1155 Dairy Ashford Rd., Suite 825, Houston, TX
Post Code: 77097
Tel: (713) 893-6111
Email: sje@sje-usa.com

Emergency call number（North America）: 1.800.424.9300 （CHEMTREC）

Emergency call number（International）: 86.010.82684990

SECTION 2: HAZARD IDENTIFICATION

Emergency Overview: **Warning!** May cause skin and eye irritation.

OSHA Hazards: Irritant

GHS Hazard Classification:
Eye irritant (Category 2A)
Skin irritant (Category 2)
Specific Target Organ Toxicity Single Exposure (Category 3)

Hazard/Precautionary Statements:
Causes skin irritation.
Causes eye irritation.
May cause respiratory irritation.
Avoid breathing dust.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Agency (NFPA) Rating: Not listed for the material mixture.
For FeS and TiO_2

Health:	2	(2=moderately hazardous)
Flammability:	0	(0=Will not burn under typical fire conditions)
Reactivity:	0	(0=No special hazards)

Potential Health Effects:
Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.
Skin: May be harmful if absorbed through skin. Causes skin irritation.
Eyes: Causes eye irritation.
Ingestion: May be harmful if swallowed.

Other Hazards: No additional hazards identified. See Section 4 for first aid measures.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity	Chemical Formula	CAS Registry Number	Weight %
BRIMSORB - SX	Fe_2O_3	1309-37-1	>72%
	TiO_2	13463-67-7	<1 %
	H_2O	7732-18-5	> 25%
	Others	----------	< 2%

SECTION 4: FIRST AID MEASURES

General Advice: Consult MSDS before use of this product. Wear proper personal protective equipment before entering area of exposure (see Section 8). Consult a physician in case of overexposure. Show this safety data sheet to the doctor in attendance. Move victim out of area of exposure.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, including under eyelids. Remove contacts if present and continue to flush. Seek medical attention if irritation develops or persists.

Skin: Flush skin with plenty of water for at least 5 minutes. Remove contaminated clothing and footwear and wash before reuse. Seek medical attention if irritation develops or persists.

Ingestion: In case of ingestion, drink two glasses of water and press throat with fingers to induce vomiting immediately. Seek medical attention immediately.

Inhalation: In case of inhalation, get medical attention immediately for solid foreign matter inhalation.

Protection of First-Aid Responders: Wear personal protective equipment suitable to level of exposure and surrounding conditions (see Section 8).

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special Fire Hazards: Hazardous decomposition products formed under fire conditions.-Iron oxides

Precautions for Firefighters: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus (SCBA) with full-face piece operated in the pressure demand or other positive pressure mode. See also Section 8. Keep run-off water out of sewers and water sources.

Special Extinguishing Methods: Keep adjacent drums and tanks cool by spraying with water.

Flash Point (Method): Not available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate personal protective equipment (see Section 8). Evacuate to a safe location. Seek medical attention if symptoms of overexposure develop.

Emergency Procedures: Keep public away. Isolate and evacuate area of spill. Shut off source if safe to do so. Wear appropriate personal protective equipment (see Section 8).

Environmental Precautions: Prevent contamination of soil and water. Prevent from entry into sewers and waterways by using sand, earth or other appropriate barriers. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities (see Section 15). Advise authorities and National Response Center if substance has entered a waterway or sewer. The toll free number for the US Coast Guard National Response Center is (800) 424-8802. Notify local health and pollution control agencies, if appropriate.

Methods and Materials for Containment: Prevent entry into sewers and waterways using physical barriers such as soil, sand, vermiculite or other appropriate barrier.

Methods and Materials for Cleaning Up: With shovel or scoop, place material into clean, dry container; move containers from spill area. Minimize airborne particulates. Protect against inhalation of dusts. Wear gloves and long sleeves. Avoid contact with skin. Use eye protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: Avoid ANY crushing on the material. Avoid sudden drop or any other kinds of shocking on the material. Specialized personnel and tools are need to for loading and unloading, for details, please refer to manufacturer's operating manual or directly consult with manufacturer.

Avoid contact with eyes. Avoid breathing fumes or vapors. Do NOT consume. Keep container closed. Wash hands after handling. Remove contaminated clothing and protective equipment before eating or entering eating areas.

Conditions for Safe Storage: Keep containers tightly closed in a cool, well-ventilated place. Avoid moisture/ water. Avoid acids. Keep away from fire or heat source. Purge with inert gas to maintain quality (Nitrogen).

Packaging Materials: Use airtight stainless steel vessels as container. For additional regulation on containers, please refer to manufacturer's operating manual.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters:

Components	CAS-No.	Value	Control parameters	Basis
Diiron trioxide	1309-37-1	TWA	5 mg/m^3	USA. ACGIH Threshold Limit Values (TLV)
Remarks	Pneumoconiosis Not classifiable as a human carcinogen			
		TWA	15 mg/m^3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		TWA	5 mg/m^3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		TWA	10 mg/m^3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		TWA	10 mg/m^3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000

		TWA	5 mg/m^3	USA. NIOSH Recommended Exposure Limits

Engineering Controls: Provide safety showers and eyewash stations. Mechanical ventilation of the area recommended. A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion into the general work area. Please refer to the ACGIH document, *Industrial Ventilation: A Manual of Recommended Practices,* most recent edition, for details.

Personal Protective Equipment:

Respiratory: Ensure adequate ventilation, especially in confined areas. Where local exhaust ventilation is not practical, wear half mask respirator with organic vapor cartridge and built-in particulate filter type NPF 20 (gas only), type P95 (US) or type P1 (EN143). WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator. See OSHA 29 CFR 1910.134 for details on written respirator program requirements and selection guidelines where respirators are part of required protective equipment.

Hands: Wear chemical resistant gloves when handling this product. Compatible glove materials include polypropylene and ethylene propylene. Nitrile, fluorocarbon and neoprene gloves are only suitable for splash resistance and should be changed if contaminated. PVC is not suitable. Wash thoroughly after handling.

Eyes: Use chemical safety goggles or masks. Do NOT wear contact lenses. Maintain eye wash fountain and quick-drench facilities in work area.

Skin and Body: Wear standard issue work clothes, including safety shoes or boots (chemical resistant). Appropriate body protection depends on the concentration and form of exposure. In extremely high concentration exposure situations, a full protective body suit may be advisable. More details please refer to manufacturer's operation manual.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid	Vapor Pressure	NA
Color	Brown	Vapor Density	NA
Odor	No data available	Density	~5.12 kg/L
Odor Threshold	No data available	Solubility	No data available
pH (Concentration)	No data available	Partition Coefficient	No data available
Freezing/Melting Point	No data available	Auto ignition Temperature	No data available
Boiling Point	Decomposes	Decomposition Temperature	No data available
Melting Point	~1566°C	Viscosity	No data available
Evaporation Rate	No data available	Explosive Properties	No data available
Flammability (solid, gas)	No data available	Oxidizing Properties	No data available
Upper/Lower Flammability or Explosive Limits	Not flammable	Other Safety Information	No data available

The product properties listed are not product specifications, and are listed for safety data only. Some properties may be estimated.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: This material is stable under recommended storage conditions.

Hazardous Reactions: No data available

Conditions to Avoid: No data available

Incompatible Materials to Avoid: Chloroformates, Peroxides, Strong acids

Hazardous Decomposition Products: Hazardous decomposition products formed under fire conditions. - Iron oxides
Other decomposition products - no data available

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity: No data available

Eye Effects: Eye irritation

Skin Effects: No data available

Ingestion Effects: May cause irritation to digestive tract.

Inhalation Effects: May cause respiratory tract irritation.

Sensitization:	No data available
Carcinogenicity:	No data available
Reproductive Cell Mutagenicity:	No data available
Reproductive Toxicity and Teratogenicity:	No data available
Specific Organ Toxicity:	May cause damage to organs (lungs) through prolonged or repeated exposure.
Aspiration Hazard:	No data available
Other Effects:	No data available

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:	LC50 – Not listed LC50 – Not listed EC50 – Not listed Ecological information is not available for all components. Available information and effects for components are presented in this section. No data is available for the mixture as a whole.
Persistence and Degradability:	Not listed
Bioaccumulative Potential:	Not listed
Mobility in Soil:	Not listed
Other Adverse Effects:	Not listed

SECTION 13: DISPOSAL CONSIDERATIONS

Product:	Qualified recovery organizations are authorized for disposal. Dispose in accordance with state and local environmental protection regulations and requirements.
Contaminated Packaging:	Treat as unused product and dispose of appropriately.

SECTION 14: TRANSPORT INFORMATION

This MSDS is NOT intended for shipping purposes.

SECTION 15: REGULATORY INFORMATION

OSHA Hazards
Irritant

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards: No SARA hazards

Acute Health Hazard

Massachusetts Right To Know Components

CAS-No.1309-37-1

Diiron trioxide

Revision Date 2007-03-01

Pennsylvania Right To Know Components

CAS-No.1309-37-1

Diiron trioxide

Revision Date 2007-03-01

New Jersey Right To Know Components

CAS-No.1309-37-1

Diiron trioxide

Revision Date 2007-03-01

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: OTHER INFORMATION

No additional information.

END OF MSDS