

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Name: Ferric Oxide

Synonyms: Iron Oxide

1.2. Intended Use of the Product

Use of the substance/mixture: Iron supply for various industries, pigment for various industries

1.3. Name, Address, and Telephone of the Responsible Party

Company

REMURIATE Technologies

122 Marquette Street

LaSalle, IL 61301

USA

815-220-5050

orders@remuriate.com

www.remuriate.com

Manufacturer

REMURIATE Technologies

830 Tin Mill Road

Birmingham, AL 35224

USA

815-220-5050

1.4. Emergency Telephone Number

Emergency Number : 800-255-3924 ChemTel Inc.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Not classified

2.2. Label Elements

GHS-US Labeling

No labeling applicable

2.3. Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate individuals with pre-existing skin and pulmonary disorders.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Name	Product identifier	%	Classification (GHS-US)
Iron oxide	(CAS No) 1309-37-1	100	Not Classified

Full text of H-phrases: see section 16

3.2. Mixture Not applicable

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If injury occurs or if you feel unwell seek medical advice.

First-aid Measures After Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Rinse with plenty of water. Seek medical attention if ill effect or irritation develops.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention. Rinse with water while holding eyelids open.

First-aid Measures After Ingestion: Rinse mouth. Get medical advice and attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: None expected under normal conditions of use.

Symptoms/Injuries After Inhalation: Repeated inhalation of iron oxide dust can cause siderosis a benign condition.

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Symptoms/Injuries After Skin Contact: Skin contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Eye Contact: Dust may cause mechanical irritation to eyes, nose, throat, and lungs.

Symptoms/Injuries After Ingestion: May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Chronic Symptoms: Prolonged contact with dust can produce mechanical irritation.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: No reactivity hazard.

5.3. Advice for Firefighters

Precautionary Measures Fire: Do not breathe fumes from fires or vapors from decomposition.

Firefighting Instructions: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not breathe dust or fumes. Avoid contact with skin and eyes.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Ventilate area.

6.2. Environmental Precautions

Avoid release to the environment.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Avoid generation of dust during clean-up of spills.

6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Use care during processing to minimize generation of dust.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Always wash your hands immediately after handling this product, and once again before leaving the workplace. Do not eat, drink or smoke in areas where product is used.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in original container.

7.3. Specific End Use(s)

Iron supply for various industries, pigment for various industries

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Iron oxide (1309-37-1)		
USA ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	5 mg/m ³
USA IDLH	US IDLH (mg/m ³)	2500 mg/m ³

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USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
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8.2. Exposure Controls

Appropriate Engineering Controls : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment : Avoid all unnecessary exposure. Gloves. Safety glasses. Dust formation: dust mask.



Materials for Protective Clothing : Chemically resistant materials and fabrics.

Hand Protection : Protective gloves.

Eye Protection : Chemical goggles or safety glasses.

Skin and Body Protection : Wear suitable protective clothing.

Respiratory Protection : Dust mask. In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental Exposure Controls : Do not allow the product to be released into the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Red
Odor	: No data available
Odor Threshold	: No data available
pH	: No data available
Relative Evaporation Rate (butylacetate=1)	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20 °C	: No data available
Relative Density	: No data available
Solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Viscosity	: No data available

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

- 10.1 Reactivity:** No reactivity hazard.
- 10.2 Chemical Stability:** Stable under normal temperature and pressure.
- 10.3 Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4 Conditions to Avoid:** Avoid creating or spreading dust.
- 10.5 Incompatible Materials:** None known.
- 10.6 Hazardous Decomposition Products:** Not available

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Iron oxide (1309-37-1)

LD50 Oral Rat	> 10000 mg/kg
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Skin Corrosion/Irritation: Not classified

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Serious Eye Damage/Irritation: Not classified
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Carcinogenicity: Not classified

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IARC group	3

Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: Repeated inhalation of Iron oxide dust can cause siderosis a benign condition.
Symptoms/Injuries After Skin Contact: Skin contact with large amounts of dust may cause mechanical irritation.
Symptoms/Injuries After Eye Contact: Dust may cause mechanical irritation to eyes, nose, throat, and lungs.
Symptoms/Injuries After Ingestion: May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
Chronic Symptoms: Prolonged contact with dust can produce mechanical irritation.

SECTION 12: ECOLOGICAL INFORMATION

- 12.1. **Toxicity** No additional information available
- 12.2. **Persistence and Degradability** No additional information available
- 12.3. **Bioaccumulative Potential** No additional information available
- 12.4. **Mobility in Soil** No additional information available
- 12.5. **Other Adverse Effects** No additional information available

SECTION 13: DISPOSAL CONSIDERATIONS

- 13.1. **Waste treatment methods**
Waste Treatment Methods: Recycle product or dispose properly.
Waste Disposal Recommendations: Dispose in a safe manner in accordance with local/national regulations.
Ecology – Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

- 14.1 **In Accordance with DOT** Not regulated for transport
- 14.2 **In Accordance with IMDG** Not regulated for transport
- 14.3 **In Accordance with IATA** Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

Iron oxide (1309-37-1)
Listed on the United States TSCA (Toxic Substances Control Act) Inventory

15.2 US State Regulations

Iron oxide (1309-37-1)
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)
U.S. - Idaho - Occupational Exposure Limits - TWAs
U.S. - Massachusetts - Right To Know List
U.S. - Michigan - Occupational Exposure Limits - TWAs
U.S. - Minnesota - Hazardous Substance List
U.S. - Minnesota - Permissible Exposure Limits - TWAs
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New York - Occupational Exposure Limits - TWAs
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 8-Hour
U.S. - Oregon - Permissible Exposure Limits - TWAs

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U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Tennessee - Occupational Exposure Limits - TWAs
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term
U.S. - Vermont - Permissible Exposure Limits - TWAs
U.S. - Washington - Permissible Exposure Limits - STELs
U.S. - Washington - Permissible Exposure Limits - TWAs
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 40 Feet
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 40 Feet to Less Than 75 Feet
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 75 Feet or Greater
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights Less Than 25 Feet

SECTION 16: OTHER INFORMATION, INCLUDING DATA ON DATE OF PREPARATION OR LAST REVISION

Revision date : 03/24/2014

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)