



Material Safety Datasheet

HEMATITE (HI-DENSE)**1. DESCRIPTION****Trade Name:** HEMATITE (HI-DENSE)**Chemical Class:** Mineral**Chemical Name:** Iron III Oxide**Application:** Pigments, Preparations for heavy media separation, Radiation shielding, Ballast, Drilling fluid**Supplier:** TEAM Chemicals**Telephone:** +44 (0)207 408 7700 - +98 912 3717539**Address:** No. 43, Souri St., 43 Ashrafi Esfahani Expressway**2. COMPOSITION / INFORMATION ON INGREDIENTS****Ingredients**

Chemical name	CAS-RN	%
Hematite	1317-60-0	> 95

3. HAZARD IDENTIFICATION**EMERGENCY OVERVIEW:**

Do not breathe dust. Avoid contact with skin.

Potential Acute Health Effects:

Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.

The substance is toxic to lungs, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage.

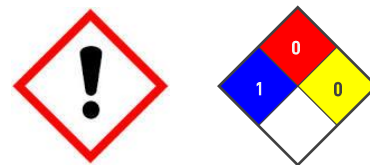
NOTES TO PHYSICIAN

For acute or short term repeated exposures to iron and its derivatives:

- Always treat symptoms rather than history.
- In general, however, toxic doses exceed 20 mg/kg of ingested material (as elemental iron) with lethal doses exceeding 180 mg/kg.
- Control of iron stores depend on variation in absorption rather than excretion. Absorption occurs through aspiration, ingestion and burned skin.



- Hepatic damage may progress to failure with hypoprothrombinemia and hypoglycemia. Hepatorenal syndrome may occur.
- Iron intoxication may also result in decreased cardiac output and increased cardiac pooling which subsequently produces hypotension.

Irritant Yes**Flammable** No**Carcinogenic** No**Oxidant** No**Explosive** No**Environmental Hazard** No**Corrosive** No**(Risk-Phrases)** -**(Safety-Phrases)** -

4. FIRST AID MEASURES

SWALLOWED

- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Seek medical advice.

EYE

If this product comes in contact with the eyes:

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- If pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.



SKIN

If skin or hair contact occurs:

- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

INHALED

- If dust is inhaled, remove from contaminated area.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA Non combustible.

- There is no restriction on the type of extinguisher which may be used.

FIRE FIGHTING Product is not combustible. No special firefighting procedures required.

Alert Fire Brigade and tell them location and nature of hazard.

Use fire fighting procedures suitable for surrounding area.

FIRE/EXPLOSION HAZARD Non combustible.

- Not considered a significant fire risk, however containers may burn.
- Iron oxide is unlikely to decompose at temperatures attained in a fire.

FIRE INCOMPATIBILITY Not determined

PERSONAL PROTECTION Not determined

6. ACCIDENTAL RELEASE MEASURES

Small Spill: Clean up all spills immediately.

Use dry clean up procedures and avoid generating dust.

If exposure to workplace dust is not controlled, respiratory protection is required; wear SAA approved dust respirator.

Large Spill: · Clear area of personnel and move upwind.

- If inhalation risk of exposure exists, wear SAA approved dust respirator.
- Collect recoverable product into labelled containers for recycling.

7. HANDLING AND STORAGE

HANDLING Precautions:

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage.

Storage Precautions: Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE CONTROLS

The following materials had no OELs on our records

- hematite: CAS:1317- 60- 8

PERSONAL PROTECTION

EYE

- Safety glasses with side shields; or as required,
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable.

HANDS/FEET - Wear physical protective gloves, eg. leather. - Wear safety footwear.

OTHER - Overalls. - Eyewash unit.

Respiratory Protection If the exposure limit is exceeded, a half-face dust/mist respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece dust/mist respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical state and appearance: Powder

Color: Red to brown

Odor: Odorless

pH(1% solution): Minimum 6.5

Boiling Point: Not applicable

Melting/Freezing Point: Not applicable

Specific Gravity: 4.9-5.15

Solubility (Water): Insoluble

Mesh Size (%wt.) Maximum 1.5% retained by mesh 200 (75 micron)

Alkalinity as Calcium ions Maximum 100 ppm



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10. STABILITY & REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Avoid wet and humid conditions

Materials to Avoid: Carbon monoxide, hydrazine, calcium hypo chloride, performic acid, bromine pentafluoride.

Special Remarks on Reactivity: None known

Special Remarks on Corrosivity: Not determined

11. TOXICOLOGICAL INFORMATION

The substance is toxic to lungs, mucous membranes. No LD50/LC50 information found relating to normal routes of occupational exposure. Investigated as a tumorigenic agent.

12. ECOLOGICAL INFORMATION

Component Ecotoxicity Data: No data available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the original product.

13. DISPOSAL CONSIDERATION

WASTE MANAGEMENT: · Recycle wherever possible or consult manufacturer for recycling options.

· Consult State Land Waste Management Authority for disposal.

· Bury residue in an authorized landfill.

DISPOSAL METHODS: Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.

14. TRANSPORT INFORMATION

HAZCHEM: None

U.S. DOT Shipping Description: NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS:UN, IATA, IMDG



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15. REGULATORY INFORMATION

Classification:

Based on available information, not classified as hazardous according to Safe Work; NON-HAZARDOUS CHEMICAL.

Poisons Schedule (SUSMP): None allocated.

This material is listed on the international standard such as OHSAS 18001:2007.

16. ADDITIONAL INFORMATION

3 Yearly Revised Primary MSDS

Update in Toxicological Information

Update in Ecological Information

This MSDS summaries to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. TEAM cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.



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 **Address:** No. 43, Souri St., 43 Ashrafi Esfahani Expressway

 **Telephone:** +44 (0)207 408 7700 - +98 912 3717539

 **Email:** sales@teamchem.co

 **Website:** www.teamchem.co

 **LinkedIn:** [linkedin.com/company/team-chemicals/](https://www.linkedin.com/company/team-chemicals/)

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. TEAM Chemicals and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.