
Hematite (Fe₂O₃)

This document provides a brief description of hematite, its uses, and the potential hazards associated with short and long term exposure. Environmental impact information for accidental releases is included. This information is general in nature and is not intended as a replacement for the safety data sheet (SDS), product label and other safe handling literature. For additional information consult the LANXESS Corporation safety data sheet.

Identification

Chemical Name: Hematite (Fe₂O₃)

Synonym(s): Hematite
Iron Oxide, Red

CAS Number: 1317-60-8

Applicable LANXESS Materials: *Please contact a LANXESS sales representative.*

Description

Overview: Hematite (Fe₂O₃) is a solid, reddish-brown powder at room temperature.

Uses: This material may be used as a colorant/pigment.

Properties:

Solubility in Water:	insoluble
Density:	3.9 (20°C)
Melting Point:	1560 °C (2840 °F)

Potential Human Health Effects

Occupational Exposure

Potential for occupational exposure exists during manufacture, and in unloading, storage, staging and transfer operations at facilities using the LANXESS material in the production of other products. A much lower potential for exposure exists in facilities using this substance in closed manufacturing processes by trained personnel.

Employee Training

Workers handling the LANXESS manufactured material should be trained to implement proper handling procedures and to understand the potential health and physical hazards of this product. Process enclosures, local exhaust ventilation, or other engineering controls should be used to protect workers from potential airborne concentrations. In cases where ventilation is insufficient or airborne concentrations are unknown, a NIOSH approved, air-purifying particulate respirator should be used. In addition, it is recommended to use permeation resistant gloves, splash proof goggles, and work clothing and foot protection when handling the substance.

Consumer Exposure

LANXESS Corporation does not sell hematite, nor materials containing the substance, to the general public.

Short-Term Health Effects

This material is harmful if swallowed and by skin contact. Symptoms of ingestion include vomiting, diarrhea, and abdominal pain. By skin contact, hematite may cause itching, redness, and irritation. If inhaled, hematite may cause drowsiness or dizziness, respiratory tract irritation with coughing and/or difficulty breathing, and damage to respiratory systems.

Long-Term Health Effects

No known significant long-term health effects.

Physical Hazards

This material is stable under normal conditions of use. Avoid the creation of dust, extreme temperatures, and contact with the following substances: aluminum powder, calcium hypochlorite, hydrazine, ethylene oxide, and peroxides. Heating to decomposition may release metal oxides.

Potential Environmental Impact

No known significant environmental effects.

Conclusion

Under normal conditions of anticipated use as described in this Product Safety Assessment, and if the recommended safe use and handling procedures are followed, this material is not expected to pose a significant risk to human health or the environment.

References

European Chemicals Agency, Hematite, December 2018

Safety Data Sheet (SDS), 1414 XF, LANXESS Corporation, November 2018

Contact Information

LANXESS Corporation, Product Safety & Regulatory Affairs, 111 RIDC Park West Drive,
Pittsburgh, PA 15275-1112, USA, Phone 1-800-526-9377 [1-800-LANXESS]

Notices

Use and Application Information

The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent.