

1. Product and company identification

Product name : BAYFERROX 140 QE66

Supplier/Manufacturer : LANXESS Corporation
Product Safety & Regulatory Affairs
111 RIDC Park West Drive
Pittsburgh, PA 15275-1112
USA

For information: US/Canada (800) LANXESS
International +1 412 809 1000

In case of emergency : Chemtrec (800) 424-9300
International (703) 527-3887
Lanxess Emergency Phone (800) 410-3063.
56888113

2. Hazards identification

Physical state : Solid. [powders]

Odor : Odorless.

Color : Red.

Emergency overview : CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. MAY CAUSE MECHANICAL IRRITATION (ABRASION).

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

Potential acute health effects / Over-exposure signs/symptoms

Inhalation : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. May cause mechanical irritation (abrasion).

Ingestion : No known significant effects or critical hazards.

Skin : May cause mechanical irritation (abrasion).

Eyes : May cause mechanical irritation (abrasion). Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Potential chronic health effects

Chronic effects : Contains material that may cause target organ damage, based on animal data. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. Prolonged inhalation (6 to 10 years) of iron oxide fume has been reported to produce changes in lung x-rays of exposed individuals. This condition, siderosis, is considered to be a benign pneumoconiosis that exhibits no adverse health effects. Siderosis has been observed among occupations such as arc-welders where iron oxide fumes are present. To the best of our knowledge, this condition has not been observed after prolonged exposure to iron oxide pigments.

Carcinogenicity : No carcinogenetic substances as defined by IARC, NTP and/or OSHA.

Target organs : Contains material which may cause damage to the following organs: lungs.

3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Iron (III) Oxide	1309-37-1	>= 95

4. First aid measures

Eye contact	: Check for and remove any contact lenses. In case of contact flush eyes with plenty of luke warm water. Get medical attention if symptoms occur.
Skin contact	: Wash with plenty of soap and water. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Inhalation	: If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Notes to physician	: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Extinguishing media

Suitable	: Use an extinguishing agent suitable for the surrounding fire.
Not suitable	: None known.
Special exposure hazards	: Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: metal oxide/oxides
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions	: No action shall be taken involving any personal risk or without suitable training. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.
Spill and Leak Procedures.	: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal.

7. Handling and storage

Handling	: Put on appropriate personal protection equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
-----------------	---

7. Handling and storage

Storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Ingredient	Exposure limits
Iron (III) Oxide	ACGIH TLV (United States, 2/2010). TWA: 5 mg/m ³ 8 hour(s). Form: Respirable fraction; see Appendix C OSHA PEL (United States, 6/2010). TWA: 10 mg/m ³ 8 hour(s).

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures : General dilution and local exhaust as necessary to control airborne vapors, mists, dusts, and thermal decomposition products below appropriate airborne concentration standards/guidelines.

Personal protection

Respiratory : The following respirator is recommended if airborne concentrations exceed the appropriate standard/guideline. NIOSH approved, air-purifying particulate respirator with N-95 filters.

Hands : No special measures are required.

Eyes : Safety glasses with side shields.

Skin : No special skin protection requirements during normal handling and use.

9. Physical and chemical properties

Physical state : Solid. [powders]
Color : Red.
Odor : Odorless.
pH : 4 to 8 [Conc. (% w/w): 5%]
Melting/freezing point : >1000°C (>1832°F)
Specific gravity : 4 to 5
Bulk density : 300 to 1000 kg/m³
Viscosity : Dynamic: Not applicable.

10. Stability and reactivity

Chemical stability	: The product is stable.
Conditions to avoid	: No specific hazard.
Materials to avoid	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

Acute toxicity

<u>Product/ingredient name</u>	<u>Result</u>	<u>Species</u>	<u>Dose</u>	<u>Exposure</u>
Iron (III) Oxide	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

Skin	: Non-irritating *Test results on an analogous product
Eyes	: Non-irritating *Test results on an analogous product

Sensitizer

<u>Product/ingredient name</u>	<u>Route of exposure</u>	<u>Species</u>	<u>Result</u>
Iron (III) Oxide	skin	Guinea pig	Not sensitizing

Carcinogenicity

<u>Product/ingredient name</u>	<u>CAS #</u>	<u>IARC</u>	<u>NTP</u>	<u>OSHA</u>
Iron (III) Oxide	1309-37-1	Not classified.	Not classified.	Not classified.

Mutagenicity

<u>Product/ingredient name</u>	<u>Test</u>	<u>Experiment</u>	<u>Result</u>
Iron (III) Oxide	Ames test	Experiment: In vitro Subject: Bacteria	Negative

12. Ecological information

Aquatic ecotoxicity

<u>Product/ingredient name</u>	<u>Result</u>	<u>Species</u>	<u>Exposure</u>
Iron (III) Oxide	Acute EC50 >10000 mg/l	Micro-organism - activated sludge	3 hours
	Acute EC50 >100 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC0 >50000 mg/L	Fish - Danio rerio	96 hours

13. Disposal considerations

Waste disposal	: Waste disposal should be in accordance with existing federal, state, provincial and/or local environmental controls. The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way.
Empty Container Precautions.	: Recondition or dispose of empty container in accordance with governmental regulations. Do not reuse container. Observe label precautions.

13. Disposal considerations

RCRA classification : If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	-	-	-	-		Not regulated.
IMDG Class	-	-	-	-		Not regulated.
IATA-DGR Class	-	-	-	-		Not regulated.

PG* : Packing group

RQ : 0 lbs

15. Regulatory information

HAZCOM Standard Status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SARA Section 311/312 Hazard Categories : Delayed (Chronic) Health Hazard

	<u>Ingredient name</u>	<u>CAS number</u>	<u>Concentration (%)</u>
--	------------------------	-------------------	--------------------------

SARA Title III Section 302 Extremely Hazardous Substances : None

<u>Ingredient name</u>	<u>CAS number</u>	<u>Concentration (%)</u>
------------------------	-------------------	--------------------------

SARA Title III Section 313 Toxic Chemicals : None

<u>Ingredient name</u>	<u>CAS number</u>	<u>RQ</u>
------------------------	-------------------	-----------

US EPA CERCLA Hazardous Substances (40 CFR 403) : None

State regulations

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections on the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

<u>Ingredient name</u>	<u>CAS number</u>	<u>State Code</u>	<u>Concentration (%)</u>
------------------------	-------------------	-------------------	--------------------------

Iron (III) Oxide	1309-37-1	MA - S, NJ - HS, PA - RTK HS	60 - 100
------------------	-----------	------------------------------	----------

Massachusetts Substances: MA - S

Massachusetts Extraordinary Hazardous Substances: MA - Extra HS

New Jersey Hazardous Substances: NJ - HS

Pennsylvania RTK Hazardous Substances: PA - RTK HS

Pennsylvania Special Hazardous Substances: PA - Special HS

California Prop. 65

15. Regulatory information

Potential exposure to some or all of the California Proposition 65 chemicals in this product have been determined to be below the No Significant Risk Level (NSRL)

<u>Ingredient name</u>	<u>CAS #</u>	<u>Concentration (%)</u>	<u>Cancer</u>	<u>Reproductive</u>
------------------------	--------------	--------------------------	---------------	---------------------

To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

U.S. Toxic Substances Control Act : Listed on the TSCA Inventory.

16. Other information

Hazardous Material Information System :	Health *	1
	Flammability	0
	Physical hazards	0

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme
*=Chronic

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



0= Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

LANXESS' method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by LANXESS as a customer service.

Contact person : Product Safety and Regulatory Affairs
Date of issue : 04-18-2011
Date of previous issue : No previous validation.
Version : 1

Indicates information that has changed from previously issued version.

Notice to reader

This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of LANXESS Corporation. The information in this MSDS relates only to the specific material designated herein. LANXESS Corporation. assumes no legal responsibility for use of or reliance upon the information in this MSDS.