

## 1. Product and company identification

**Product name** : BAYFERROX 120M 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.  
  
**Material Number** : 56695544  
**Chemical family** : Inorganic Metal oxide.

## 2. Hazards identification

**Physical state** : Solid. [Powder.]  
**Odor** : Odorless.  
**Color** : Red.  
**Emergency overview** : CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. MAY CAUSE MECHANICAL IRRITATION (ABRASION).  
**Routes of entry** : Dermal contact. Eye contact. Inhalation. Ingestion.  
**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. Respiratory tract disorders  
**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 carcinogenic 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

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

### 5. Fire-fighting measures

#### Extinguishing media

<b>Suitable</b>	: Use an extinguishing agent suitable for the surrounding fire.
<b>Not suitable</b>	: None known.
<b>Special exposure hazards</b>	: Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.
<b>Hazardous thermal decomposition products</b>	: Decomposition products may include the following materials: metal oxide/oxides
<b>Special protective equipment for fire-fighters</b>	: 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

<b>Personal precautions</b>	: No action shall be taken involving any personal risk or without suitable training.
<b>Spill and Leak Procedures.</b>	: 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

<b>Handling</b>	: 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.
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## 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	<b>ACGIH TLV (United States, 1/2011).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction <b>OSHA PEL (United States, 6/2010).</b> TWA: 10 mg/m <sup>3</sup> 8 hours.

**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. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**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** : Gloves.

**Eyes** : safety glasses with side-shields.

**Skin** : Wear cloth work clothing including long pants and long-sleeved shirts. Suitable protective footwear.

## 9. Physical and chemical properties

**Physical state** : Solid. [Powder.]  
**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/m<sup>3</sup>  
**Solubility** : Insoluble in the following materials: cold water.

## 10. Stability and reactivity

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

## 11. Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Iron (III) Oxide	LC50 Inhalation Dusts and mists	Rat	>210 mg/m <sup>3</sup>	2 weeks
BAYFERROX 120M QE66	LD50 Oral	Rat	>5000 mg/kg	-

### Irritation/Corrosion

**Skin** : Iron (III) Oxide:Non-irritating Test results on an analogous product

**Eyes** : Iron (III) Oxide:Non-irritating Test results on an analogous product

### Sensitizer

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

### Carcinogenicity

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

### Mutagenicity

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

## 12. Ecological information

### Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
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.
- 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>
<b>SARA Title III Section 302 Extremely Hazardous Substances</b>	: None		

	<u>Ingredient name</u>	<u>CAS number</u>	<u>Concentration (%)</u>
<b>SARA Title III Section 313 Toxic Chemicals</b>	: None		

	<u>Ingredient name</u>	<u>CAS number</u>	<u>RQ</u>
<b>US EPA CERCLA Hazardous Substances (40 CFR 302)</b>	: None		

**US EPA CERCLA Hazardous Substances (40 CFR 302)** : 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	>= 95

## 15. Regulatory information

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

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)

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

<b>Hazardous Material Information System</b>	<b>Health</b> *	1
	<b>Flammability</b>	0
	<b>Physical hazards</b>	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** : 11-02-2012

**Date of previous issue** : No previous validation

**Version** : 1

Indicates information that has changed from previously issued version.

### Notice to reader

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