

Safety Data Sheet

1. Product and company identification

Product name : BAYFERROX 318 NM
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 : 56246634
CI Name : 77499

2. Hazards identification

Physical state : Solid. [powders]
Odor : Odorless.
Color : Black.
Emergency overview : CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. REPRODUCTIVE HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE ADVERSE REPRODUCTIVE EFFECTS IN MALES. 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.
Carcinogenicity : No carcinogenic substances as defined by IARC, NTP and/or OSHA.
Fertility effects : Contains material which can impair male fertility.
Target organs : Contains material which may cause damage to the following organs: lungs, central nervous system (CNS).

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>
Manganese	7439-96-5	1 - 5

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.
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 get in eyes or on skin or clothing. Do not ingest. Avoid breathing dust. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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 : Do not store near sources of heat (furnaces, kilns, boilers, etc.). Exposure to excessive heat may cause this product to become unstable (slowly auto-oxidize) which generates additional heat. Under certain circumstances this heat generation may be sufficient to cause combustible materials to ignite. Do not store near strong oxidizers, sources of heat, or near flammable or combustible materials. 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
Manganese	ACGIH TLV (United States, 2/2010). TWA: 0.2 mg/m ³ , (as Mn) 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.

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 : Although no exposure limit has been established for this product, the OSHA PEL for Particulates Not Otherwise Regulated (PNOR) of 15 mg/m³ - total dust, 5 mg/m³ - respirable fraction is recommended. In addition, the ACGIH recommends 3 mg/m³ - respirable particles and 10 mg/m³ - inhalable particles for Particles (insoluble or poorly soluble) Not Otherwise Specified (PNOS). 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. [powders]

Flash point : Closed cup: Not applicable.

Color : Black.

Odor : Odorless.

pH : 5 to 8 [Conc. (% w/w): 5%]

Melting/freezing point : >1000°C (>1832°F)

Specific gravity : 4 to 5

9. Physical and chemical properties

Density	: 4.6 g/cm ³
Bulk density	: 300 to 1000 kg/m ³
Solubility	: Insoluble in the following materials: cold water.

10. Stability and reactivity

Chemical stability	: The product is stable.
Conditions to avoid	: Excessive temperatures. At temperatures greater than 176 F (80 C), this product may become unstable and slowly auto-oxidize into Fe ₂ O ₃ which generates additional heat. Under certain conditions this heat may be sufficient to cause combustible materials to ignite.
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

Product/ingredient name	Result	Species	Dose	Exposure
BAYFERROX 318M	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

Skin	: Non-irritating (Rabbit)
Eyes	: Non-irritating (Rabbit)

Carcinogenicity

Product/ingredient name	CAS #	IARC	NTP	OSHA
C.I. Pigment Black 11	1317-61-9	Not classified.	Not classified.	Not classified.

12. Ecological information

Aquatic ecotoxicity

No information available.

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)

13. Disposal considerations

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 : None

<u>Ingredient name</u>	<u>CAS number</u>	<u>Concentration (%)</u>
: None		

SARA Title III Section 302 Extremely Hazardous Substances

<u>Ingredient name</u>	<u>CAS number</u>	<u>Concentration (%)</u>
: Manganese	7439-96-5	1 - 5

SARA Title III Section 313 Toxic Chemicals

<u>Ingredient name</u>	<u>CAS number</u>	<u>RQ</u>
: None		

US EPA CERCLA Hazardous Substances (40 CFR 302)

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>
Manganese	7439-96-5	MA - S, NJ - HS, PA - RTK HS	1 - 5
C.I. Pigment Black 11	1317-61-9		>= 95
Sodium-/calcium-/chloride/ sulfate+Carbon			1 - 5

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)

15. Regulatory information

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
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Version : 1

☑ Indicates information that has changed from previously issued version.

Notice to reader

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