

SAFETY DATA SHEET

BAYFERROX 645 T

Version 1.0 Revision Date: 02/27/2020 SDS Number: 103000027012 Date of previous issue: -
Country / Language: US / EN

SECTION 1. IDENTIFICATION

Product name : BAYFERROX 645 T
Material number : 00005533
Chemical family : inorganic
Recommended use : Colorants (pigments and dyestuffs), inorganic

Manufacturer or supplier's details


Supplier : LANXESS Corporation
Product Safety & Regulatory Affairs
111 RIDC Park West Drive
PittsburghPA 15275-1112
USA
Telephone : +1800LANXESS
+14128091000 (international)
Emergency telephone : CHEMTREC (800) 424 9300
International (703) 527 3887
Lanxess Emergency Phone (800) 410-3063

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Specific target organ toxicity : Category 2 (Central nervous system)
- repeated exposure (Inhalation)

GHS label elements

Hazard pictograms : 

Signal Word : Warning

Hazard Statements : May cause damage to organs (Central nervous system) through prolonged or repeated exposure if inhaled.

Precautionary Statements : **Prevention:**
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Response:
Get medical advice/ attention if you feel unwell.
Disposal:

SAFETY DATA SHEET

BAYFERROX 645 T



Version 1.0 Revision Date: 02/27/2020 SDS Number: 103000027012 Date of previous issue: -
Country / Language: US / EN

Dispose of contents/ container to an approved waste disposal plant.

Hazard Not Otherwise Classified (HNOC)

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : FeMnO₃

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
manganese ferrite black spinel	68186-94-7	>= 90 - <= 100

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4. FIRST AID MEASURES

If inhaled : Move to fresh air.
Get medical attention if symptoms occur.

In case of skin contact : Wash off with plenty of water.
Continue to rinse for at least 10 minutes.
Wash contaminated clothing before re-use.

In case of eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.
If easy to do, remove contact lens, if worn.
Continue to rinse for at least 10 minutes.
Get medical attention if symptoms appear.

If swallowed : Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

Symptoms : Skin: May cause irritation with symptoms of reddening and itching.
Eye: May cause irritation with symptoms of reddening, tearing and stinging.

Effects : May cause mechanical irritation (abrasion).
: May cause damage to organs through prolonged or repeated exposure if inhaled.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : In case of fire, use water spray (fog), foam, dry chemical or

SAFETY DATA SHEET

BAYFERROX 645 T



Version 1.0 Revision Date: 02/27/2020 SDS Number: 103000027012 Date of previous issue: -
Country / Language: US / EN

- CO₂.
- Unsuitable extinguishing media : None known.
- Specific hazards during fire fighting : No information available.
- Hazardous combustion products : Metal oxides
- Further information : The product itself does not burn.
Standard procedure for chemical fires.
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- 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.
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SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : No action shall be taken involving any personal risk or without suitable training.
Keep unnecessary and unprotected personnel from entering.
Avoid breathing dust.
Use personal protective equipment.
Avoid dust formation.
- Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods and materials for containment and cleaning up : Move containers from spill area.
Vacuum or sweep up material and place in a designated, labeled waste container.
Dispose of wastes in an approved waste disposal facility.
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SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.

Workers should wash hands and face before eating, drinking and smoking.
- Conditions for safe storage : Store in accordance with local regulations.
-

SAFETY DATA SHEET

BAYFERROX 645 T



Version 1.0 Revision Date: 02/27/2020 SDS Number: 103000027012 Date of previous issue: -
Country / Language: US / EN

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 containers tightly closed in a dry, cool and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.

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.

Further information on storage stability : Keep in a dry place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
manganese ferrite black spinel	68186-94-7	C	5 mg/m ³ (Manganese)	OSHA Z-1
		TWA (Inhalable particulate matter)	0.1 mg/m ³ (Manganese)	ACGIH
		TWA (Respirable particulate matter)	0.02 mg/m ³ (Manganese)	ACGIH

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

Respiratory protection : Dust-protection mask if there is a risk of dust formation.

Hand protection
Material : Gloves

Eye protection : Safety glasses with side-shields

Skin and body protection : Wear suitable protective clothing.

Hygiene measures : General industrial hygiene practice.

SAFETY DATA SHEET

BAYFERROX 645 T



Version	Revision Date:	SDS Number:	Date of previous issue: -
1.0	02/27/2020	103000027012	Country / Language: US / EN

When using do not eat, drink or smoke.
Wash face, hands and any exposed skin thoroughly after handling.
Wash contaminated clothing before reusing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	:	solid
Appearance	:	powder
Color	:	brown
Odor	:	odorless
Odor Threshold	:	No data available
pH	:	5.5 - 8.5 Concentration: 5 %
Melting point/range	:	> 1,832 °F (> 1,000 °C)
Boiling point/boiling range	:	No data available
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	4.5 g/cm ³ (68 °F (20 °C))
Bulk density	:	300 - 1,000 kg/m ³
Solubility(ies) Water solubility	:	insoluble
Partition coefficient: n-octanol/water	:	No data available
Ignition temperature	:	No data available

SAFETY DATA SHEET

BAYFERROX 645 T



Version 1.0 Revision Date: 02/27/2020 SDS Number: 103000027012 Date of previous issue: -
Country / Language: US / EN

Decomposition temperature : No data available
Viscosity : No data available
Explosive properties : No data available
Oxidizing properties : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No specific test data related to reactivity available for this product or its ingredients.
Chemical stability : The product is chemically stable.
Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.
Conditions to avoid : No specific data.
Incompatible materials : No specific data.
Hazardous decomposition products : No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

The most important known symptoms and effects are described in Section 2 and/or Section 4.

Information on likely routes of exposure

Inhalation
Eye contact
Skin contact

Acute toxicity

Not classified based on available information.

Components:

manganese ferrite black spinel:

Acute oral toxicity : LD50 (Rat, male): > 10,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Components:

manganese ferrite black spinel:

Result: No skin irritation

SAFETY DATA SHEET

BAYFERROX 645 T



Version	Revision Date:	SDS Number:	Date of previous issue: -
1.0	02/27/2020	103000027012	Country / Language: US / EN

equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

May cause damage to organs (Central nervous system) through prolonged or repeated exposure if inhaled.

Components:

manganese ferrite black spinel:

Routes of exposure: Inhalation

Target Organs: Central nervous system

Assessment: May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:

manganese ferrite black spinel:

Species: Rat, male

NOAEL: 10,1 mg/m³

Application Route: inhalation (dust/mist/fume)

Exposure time: 28 d

Number of exposures: 6 hours/day

Method: OECD Test Guideline 412

GLP: yes

Remarks: Subacute toxicity

Species: Rat, male and female

NOAEL: 4,7 mg/m³

Application Route: inhalation (dust/mist/fume)

Exposure time: 91 d

Number of exposures: 6 hours/day

Method: OECD Test Guideline 413

GLP: yes

Remarks: Subchronic toxicity

Aspiration toxicity

Not classified based on available information.

SAFETY DATA SHEET

BAYFERROX 645 T



Version 1.0 Revision Date: 02/27/2020 SDS Number: 103000027012 Date of previous issue: -
Country / Language: US / EN

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

manganese ferrite black spinel:

- Toxicity to fish : LC50 (Danio rerio (zebra fish)): \geq 100,000 mg/l
Exposure time: 96 h
GLP: no
Remarks: Fresh water
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): \geq 10,000 mg/l
Exposure time: 48 h
Method: Regulation (EC) No. 440/2008, Annex, C.2
GLP: no
Remarks: Fresh water
- Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (microalgae)): $>$ 100 mg/l
Exposure time: 72 h
Method: Regulation (EC) No. 440/2008, Annex, C.2
Remarks: Fresh water
- Toxicity to microorganisms : EC50 (activated sludge): \geq 10,000 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209
Remarks: Fresh water

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

- Additional ecological information : Ecotoxicological data are not available.
No known significant effects or critical hazards.
-

SECTION 13. DISPOSAL CONSIDERATIONS

- RCRA - Resource Conservation and Recovery Authorization Act : 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)
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SAFETY DATA SHEET

BAYFERROX 645 T



Version 1.0 Revision Date: 02/27/2020 SDS Number: 103000027012 Date of previous issue: -
Country / Language: US / EN

Disposal methods : The generation of waste should be avoided or minimized wherever possible.
This material and its container must be disposed of in a safe way.
Empty containers retain product residue; observe all precautions for product.
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Waste disposal should be in accordance with existing federal, state, provincial and/or local environmental controls.

SECTION 14. TRANSPORT INFORMATION

Domestic regulation

DOT

Not regulated as a dangerous good

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

CERCLA

None

Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Specific target organ toxicity (single or repeated exposure)

SARA 313

The following components are subject to reporting levels established by SARA Title III, Section 313:

Components	CAS-No.	Concentration
manganese ferrite black spinel	68186-94-7	90 - 100 %

SAFETY DATA SHEET

BAYFERROX 645 T



Version 1.0 Revision Date: 02/27/2020 SDS Number: 103000027012 Date of previous issue: -
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US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

manganese ferrite black spinel 68186-94-7

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive defects.

TSCA inventory

TSCA : On TSCA Inventory

TSCA list

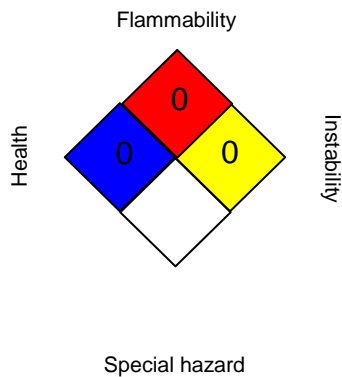
No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS® IV:

HEALTH	/	0
FLAMMABILITY		0
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

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

Revision Date : 02/27/2020

This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of our knowledge. The information provided in this Safety Data Sheet (SDS) is correct to the best of our knowledge, information and belief at the date of its publication. We assume no legal responsibility for use of or reliance upon the information in this SDS.

SAFETY DATA SHEET

BAYFERROX 645 T



Version
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SDS Number:
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