



| Vers 1.0 | ion | Revision Date: 10/03/2020 | | S Number: 000002642 | Date of last issue: - Country / Language: US / EN |
|-------------|--------------|------------------------------|------|--|--|
| SEC | TION 1. | IDENTIFICATION | | | |
| | Product name | | : | BAYFERROX 686 | 66 PIGMENT |
| | Product | code | : | 0000000000337 | 7354 |
| | Manufa | cturer or supplier's d | etai | ls | |
| | Compai | ny | : | 111 RIDC Park V | Regulatory Affairs |
| | Respon | sible Department | : | +1800LANXESS | |
| | Emerge | ncy telephone number | : | Chemtrec (800) 4 International (703 Lanxess Emerge | |
| | Baaam | mandad usa of the ok | | and reatrictic | |

Recommended use of the chemical and restrictions on use

| Recommended use | : | Colorants (pigments and dyestuffs), inorganic |
|-----------------|---|---|
|-----------------|---|---|

SECTION 2. HAZARDS IDENTIFICATION

| GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200). | | | | | |
|--|---|--|--|--|--|
| Specific target organ toxicity - repeated exposure (Inhala- tion) | : | Category 2 (Central nervous system) | | | |
| 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. | | | |
| | | 1/13 | | | |





>= 30 - < 50

BAYFERROX 6866 PIGMENT

| | | | | | _ | | | | |
|---|---|----------------|--------------------------|---------|----------|--|--|--|--|
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| _ | | | | | | | | | |
| | | | Dis | posal: | | | | | |
| | | | Dis _l plar | | ents/ co | ontainer to an approved waste disposal | | | |
| | Other | , homorado | | | | | | | |
| | • | r hazards | | | | | | | |
| | None | known. | | | | | | | |
| | SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS | | | | | | | | |
| | Subst | ance / Mixture | : Mix | ture | | | | | |
| | - | | | | | | | | |
| | Comp | oonents | | | | | | | |
| | Chem | nical name | | CAS-No. | | Concentration (% w/w) | | | |
| | | | | | | | | | |

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

75864-23-2

SECTION 4. FIRST AID MEASURES

Manganese Ferrite Spinel

| 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 a | Ind | effects, both acute and delayed |
| Symptoms | : | May cause irritation with symptoms of reddening and itching. Eye: May cause irritation with symptoms of reddening, tear- ing and stinging. |
| | : | Can cause central nervous system (CNS) depression. |
| Effects | : | May cause mechanical irritation (abrasion). |
| | : | May cause damage to organs through prolonged or repeated exposure if inhaled. |





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| SEC | SECTION 5. FIREFIGHTING MEASURES | | | | | | | | |
| Suitable extinguishing media | | : | In case of fire, use water spray (fog), foam, dry chemical or CO_2 . | | | | | | |
| | Unsuitable extinguishing media | | : | None known. | | | | | |
| | Specific hazards during fire- fighting | | : | No information available. | | | | | |
| | Hazardous combustion prod- ucts | | : | The product itself does not burn. | | | | | |
| | Further information : | | : | 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 ci- cumstances and the surrounding environment. Fire residues and contaminated fire extinguishing water mu- be disposed of in accordance with local regulations. | | | | | |
| | Special for firefi | protective equipment ghters | : | and self-contained | ld wear appropriate protective equipment d breathing apparatus (SCBA) with a full ed in positive pressure mode. | | | | |

SECTION 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protec- tive equipment and emer- gency 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, la- beled waste container. Dispose of wastes in an approved waste disposal facility. |

SECTION 7. HANDLING AND STORAGE

| Advice on protection against fire and explosion | : | Provide appropriate exhaust ventilation at places where dust is formed. | | |
|---|---|---|--|--|
| Advice on safe handling | : | For personal protection see section 8. | | |
| | | | | |



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| | | | Smoking, eating a plication area. | and drinking should be prohibited in the ap- | |
| | | | Workers should wash hands and face before eating, drinking and smoking. | | |
| Conditions for safe storage | | : | Store in original of dry, cool and well materials (see Se Keep containers to ventilated place. | ace with local regulations. container protected from direct sunlight in a -ventilated area, away from incompatible ection 10) and food and drink. tightly closed in a dry, cool and well- ions / working materials must comply with safety standards. | |
| Mate | rials to avoid | : No materials to be especially mentioned. | | e especially mentioned. | |
| | ner information on stor- stability | : | Keep in a dry pla | ce. | |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Components | CAS-No. | Value type (Form of exposure) | Control parame- ters / Permissible concentration | Basis |
|---------------------------------|------------|--|--|----------|
| Manganese Ferrite Spinel | 75864-23-2 | С | 5 mg/m3 (Manganese) | OSHA Z-1 |
| | | TWA (Inhal- able particu- late matter) | 0.1 mg/m3 (Manganese) | ACGIH |
| | | TWA (Res- pirable par- ticulate mat- ter) | 0.02 mg/m3 (Manganese) | ACGIH |
| diiron trioxide (Dust and fume) | 1309-37-1 | TWA (Res- pirable par- ticulate mat- ter) | 5 mg/m3 | ACGIH |
| | | TWA (Fumes) | 10 mg/m3 | OSHA Z-1 |
| | | TWA (total dust) | 15 mg/m3 | OSHA Z-1 |
| | | TWA (respir- able fraction) | 5 mg/m3 | OSHA Z-1 |

Components with workplace control parameters

Engineering measures

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

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| Pers | onal protective equipm | nent | | |
| Respiratory protection | | : | Dust-protection m | ask if there is a risk of dust formation. |
| | protection aterial | : | Gloves | |
| Eye protection | | : | Safety glasses wit | th side-shields |
| Skin | and body protection | : | Wear suitable pro | tective clothing. |
| Hygie | ene measures | : | Wash face, hands handling. | hygiene practice. ot eat, drink or smoke. and any exposed skin thoroughly after ed clothing before reusing. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | : | powder |
|---|---|-----------------------------|
| Colour | : | brown |
| Odour | : | odourless |
| Odour Threshold | : | No data available |
| рН | : | 4 - 8 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 |
| Self-ignition | : | No data available |
| Burning number | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |

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| | Vapour | pressure | : | No data available | 9 |
| | Relative | e density | : | No data available | 9 |
| | Density | / | : | No data available | 9 |
| | Bulk de | ensity | : | 300 - 1,000 kg/m | 3 |
| | Solubili Wat | ty(ies) er solubility | : | insoluble | |
| | | | | insoluble | |
| | Solu | ubility in other solvents | : | No data available | 9 |
| | Partitio octanol | n coefficient: n- /water | : | No data available | 9 |
| | Decom | position temperature | : | No data available | 9 |
| | Viscosi Visc | ty cosity, dynamic | : | No data available | 9 |
| | Visc | cosity, kinematic | : | No data available | 9 |
| | Explosi | ve properties | : | No data available | 9 |
| | Oxidiziı | ng properties | : | No data available | 9 |

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 reac- tions | | 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.

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Information on likely routes of exposure

Inhalation Eye contact Skin contact

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Acute toxicity

Not classified based on available information.

Components:

Manganese Ferrite Spinel:

Acute oral toxicity

: LD50 (Rat, male): > 10,000 mg/kg Remarks: Test results on an analogous product

Skin corrosion/irritation

Not classified based on available information.

Components:

Manganese Ferrite Spinel:

| Result | : | No skin irritation |
|---------|---|--------------------------------------|
| Remarks | : | Test results on an analogous product |

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Serious eye damage/eye irritation

Not classified based on available information.

Components:

Manganese Ferrite Spinel:

| Result | : | No eye irritation |
|---------|---|--------------------------------------|
| Remarks | : | Test results on an analogous product |

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

Manganese Ferrite Spinel:

| Result | : | Not a skin sensitizer. |
|---------|---|--------------------------------------|
| Remarks | : | Test results on an analogous product |

Germ cell mutagenicity

Not classified based on available information.



Version Revision Date: SDS Number: Date of last issue: -1.0 10/03/2020 20300002642 Country / Language: US / EN **Components:** Manganese Ferrite Spinel: Genotoxicity in vitro : Test system: Bacteria Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative GLP: yes Remarks: Test results on an analogous product Test system: Mammalian-Animal Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 **Result:** negative GLP: yes Remarks: Test results on an analogous product Test system: Mammalian-Animal Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative GLP: yes Remarks: Test results on an analogous product

Carcinogenicity

Not classified based on available information.

- **IARC** No component of this product present at levels greater than or 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 component 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 Spinel:

| Exposure routes | : | Inhalation |
|-----------------|---|---|
| Target Organs | : | Central nervous system |
| Assessment | : | The substance or mixture is classified as specific target organ |





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| | | | toxicant, repeated | exposure, category 2. |
| Rep | eated dose toxicity | | | |
| Proc | duct: | | | |
| Rem | arks | : | to be reviewed | |
| <u>Com</u> | nponents: | | | |
| Man | ganese Ferrite Spinel: | | | |
| Spe | | : | Rat, male | |
| NOA | ication Route | ÷ | 10.1 mg/m ³ Inhalation | |
| | atmosphere | : | dust/mist | |
| | osure time | ÷ | 4 Weeks | |
| Meth | | : | OECD Test Guide | eline 412 |
| GLP | | : | yes | |
| Rem | arks | : | Subacute toxicity | |
| | | | l est results on ar | n analogous product |
| Spee | cies | : | Rat, male and fer | nale |
| NOA | | : | 4.7 mg/m³ | |
| | ication Route | : | Inhalation | |
| | atmosphere | : | dust/mist | |
| | osure time | ÷ | 13 Weeks | |
| Meth GLP | | : | OECD Test Guide | |
| | arks | | Subchronic toxicit | ^t V |
| | | • | | n analogous product |
| | | | | |

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Manganese Ferrite Spinel:

| Toxicity to fish | No observed adverse effect level (Danio rerio (zebra fish)): >= 100,000 mg/l Exposure time: 96 h GLP: no Remarks: Test results on an analogous product |
|---|--|
| Toxicity to daphnia and other aquatic invertebrates | No observed adverse effect level (Daphnia magna (Water flea)): >= 10,000 mg/l Exposure time: 48 h |



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| | | GLP: no | ulation (EC) No. 440/2008, Annex, C.2 st results on an analogous product | |
| Toxicit plants | Toxicity to algae/aquatic plants | | okirchneriella subcapitata (microalgae)): > 100 e: 72 h ulation (EC) No. 440/2008, Annex, C.2 esh water on an analogous product | |
| | | Remarks: Te | st results on an analogous product | |
| Toxicit | y to microorganisms | Exposure tim Method: OEC | red sludge): >= 10,000 mg/l e: 3 h D Test Guideline 209 st results on an analogous product | |
| | tence and degradabi a available | lity | | |
| | cumulative potential a available | | | |
| | t y in soil a available | | | |
| Other | adverse effects | | | |
| Produc Additio mation | nal ecological infor- | | cal data are not available. nificant effects or critical hazards. | |

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

| RCRA - Resource Conserva- tion and Recovery Authoriza- tion Act | If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. Howev- er, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material contain- ing the product or derived from the product should be classi- fied as a hazardous waste. (40 CFR 261.20-24) |
|---|--|
| Waste from residues | 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 precau- tions for product. Avoid dispersal of spilled material and runoff and contact with |







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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

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.

National Regulations

49 CFR

Not regulated as a dangerous good Hazard and Handling Notes. : Not dangerous cargo, Keep separated from foodstuffs

SECTION 15. REGULATORY INFORMATION

CERCLA 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 org | Specific target organ toxicity (single or repeated exposure) | | | | | |
|---|--|---|--|----------------|--|--|--|--|
| SARA 313 | : | ponents are subject A Title III, Section 313 | s are subject to reporting levels es- I, Section 313: | | | | | |
| | | Manganese Fer- rite Spinel | 75864-23-2 | >= 30 - < 50 % | | | | |
| US State R | US State Regulations | | | | | | | |
| | Massachusetts Right To Knowdiiron trioxide (Dust and fume)1309-37-125 - 35 | | | | | | | |
| Massachus | setts Right To Know | , | | | | | | |
| di | | | | | | | | |
| Pennsylvania Right To Know | | | | | | | | |
| Manganese Ferrite Spinel Iron hydroxide oxide yellow | | | 75864-23-2 51274-00-1 | | | | | |



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| diiron trioxide (Dust and fume) | | | 1309-37-1 | 25 - 35 | | |
| Pennsylvania Right To Know | | | | | | |
| Manganese Ferrite Spinel | | | 75864-23-2 | | | |
| Iron hydroxide oxide yellow | | | 51274-00-1 | | | |
| diiron trioxide (Dust and fume) | | | 1309-37-1 | | | |

California Prop. 65

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

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

TSCA inventory

TSCA

: All substances listed as active on the TSCA inventory

TSCA list

No substances are subject to a Significant New Use Rule.

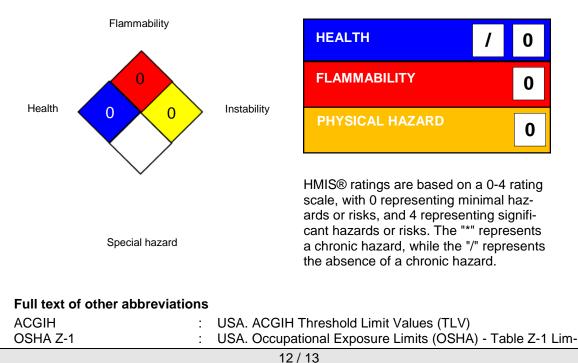
No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information



HMIS® IV:





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| | its for Air Contaminants |
|----------------|---------------------------------|
| ACGIH / TWA | : 8-hour, time-weighted average |
| OSHA Z-1 / TWA | : 8-hour time weighted average |
| OSHA Z-1 / C | : Ceiling |
| | |

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act: REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods: vPvB - Verv Persistent and Verv Bioaccumulative

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The data contained in this Safety Data Sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered to be a guidance for processing and does not contain any warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. It is the responsibility of the recipient of the product to ensure that any proprietary rights and existing laws and legislation are observed.