SECTION 1. IDENTIFICATION

Product name : BAYFERROX 110
Material number : 00006114
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
          Pittsburgh PA 15275-1112
          USA
Telephone : +1800LANXESS For information: US/Canada
          +14128091000 International
Emergency telephone : CHEMTREC (800) 424 9300
          International (703) 527 3887
          Lanxess Emergency Phone: (866) 673 6350

SECTION 2. HAZARDS IDENTIFICATION

Not a hazardous substance or mixture.

GHS label elements
Not a hazardous substance or mixture.

Hazard Not Otherwise Classified (HNOC)
Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance
Chemical nature : Fe2O3
CAS-No. : Not Assigned

Hazardous ingredients
No hazardous ingredients

SECTION 4. FIRST AID MEASURES

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

In case of skin contact: No special actions required.
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**

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>May cause irritation with symptoms of reddening and itching.</td>
<td>May cause mechanical irritation (abrasion).</td>
</tr>
<tr>
<td>Eye: May cause irritation with symptoms of reddening, tearing and stinging.</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 5. FIRE-FIGHTING MEASURES**

| Suitable extinguishing media | In case of fire, use water spray (fog), foam, dry chemical or CO₂. |
| Unsuitable extinguishing media | None known. |
| Hazardous combustion products | The product itself does not burn. |
| Further information | Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| 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. |

**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 | Move containers from spill area. |
containment and cleaning up
Vacuum or sweep up material and place in a designated, labeled waste container.
Dispose of wastes in an approved waste disposal facility.

Pick up and arrange disposal without creating dust.
Sweep up and shovel.
Keep in suitable, closed containers for disposal.

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:
Keep containers tightly closed in a dry, cool and well-ventilated place.

Further information on storage stability:
No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron (III) Oxide</td>
<td>1309-37-1</td>
<td>TWA (Respirable fraction)</td>
<td>5 mg/m3</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Fumes)</td>
<td>10 mg/m3</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (total dust)</td>
<td>15 mg/m3</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (respirable fraction)</td>
<td>5 mg/m3</td>
<td>OSHA Z-1</td>
</tr>
</tbody>
</table>

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 and gloves.

Hygiene measures: When using do not eat, drink or smoke. Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated clothing before reusing. General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: powder
Color: red
Odor: odorless
Odor Threshold: No data available
pH: 4 - 8
  Concentration: 5 %
Melting point/range: 2,849 °F (1,565 °C)
Boiling point/boiling range: No data available
Flash point: No data available
Evaporation rate: No data available
Flammability (solid, gas): No data available
Burning number: Not applicable
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: 5.25 g/cm³ (68 °F (20 °C))
Bulk density: 300 - 1,000 kg/m³
Solubility(ies)
  Water solubility: insoluble
### SECTION 10. STABILITY AND REACTIVITY

**Reactivity**: No decomposition if stored and applied as directed.

**Chemical stability**: The product is stable.

**Possibility of hazardous reactions**: No dangerous reaction known under conditions of normal use.

**Conditions to avoid**: No data available

**Incompatible materials**: No specific data.

**Materials to avoid**: No materials to be especially mentioned.

**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.

**Acute toxicity**
Not classified based on available information.

**Product:**

**Acute oral toxicity**
- LD50 (Rat): > 5,000 mg/kg
- Remarks: Information refers to the main ingredient.

**Acute inhalation toxicity**
- LC50 (Rat): > 210 mg/m³
- Exposure time: 2 Weeks
- Test atmosphere: dust/mist
- Remarks: Information refers to the main ingredient.

**Skin corrosion/irritation**
Not classified based on available information.
**Product:**
Result: No skin irritation
Remarks: Test results on an analogous product

**Serious eye damage/eye irritation**
Not classified based on available information.

**Product:**
Result: No eye irritation
Remarks: Test results on an analogous product

**Respiratory or skin sensitization**

**Skin sensitization**
Not classified based on available information.

**Respiratory sensitization**
Not classified based on available information.

**Product:**
Species: Guinea pig
Result: Not a skin sensitizer.
Remarks: Information refers to the main ingredient.

**Germ cell mutagenicity**
Not classified based on available information.

**Product:**
Genotoxicity in vitro:
Test Type: Ames test
Test system: Bacteria
Result: negative

**Carcinogenicity**
Not classified based on available information.

**IARC**
No ingredient 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 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
Not classified based on available information.

Repeated dose toxicity

**Product:**
Remarks: Long-term exposure to high concentrations of dust containing iron oxide can cause a benign condition termed “pulmonary siderosis”. This condition is not associated with any physical impairment of lung function.

Aspiration toxicity
Not classified based on available information.

Further information

**Product:**
Remarks: No data available

**SECTION 12. ECOLOGICAL INFORMATION**

Ecotoxicity

**Product:**
Toxicity to fish : LC0 (Danio rerio (zebra fish)): > 50,000 mg/l
Exposure time: 96 h
Remarks: Information refers to the main ingredient.

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Information refers to the main ingredient.

Toxicity to microorganisms : EC10 (activated sludge): > 10,000 mg/l
Exposure time: 3 h
Remarks: Information refers to the main ingredient.

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)

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: No SARA Hazards

SARA 313
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations**

**Massachusetts Right To Know**
Iron (III) Oxide 1309-37-1 > 99

**Pennsylvania Right To Know**
Iron (III) Oxide 1309-37-1 > 99

**California Prop. 65**
This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects. 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).

**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:**

Flammability:
- 0

Health:
- 0

Instability:
- 0

**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 : 05/08/2018
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