1. Identification

Product identifier
Magnetite
Substance name: Dummy Staubgrenzwerte alveogängig

Recommended use of the chemical and restrictions on use

Use of the substance/mixture
test dust

Details of the supplier of the safety data sheet

Company name: Powder Technology Inc.
Street: 1300 Grey Fox Road
Place: USA-55112 Arden Hills, MN
Telephone: +1 952 894 -8737
e-mail: sales@powdertechnologyinc.com
Internet: http://www.powdertechnologyinc.com
Emergency phone number: +1 952 894 -8737

2. Hazard(s) identification

Classification of the chemical
29 CFR Part 1910.1200
This substance is not classified as hazardous in accordance with Regulation 29 CFR 1910.1200(d).

Label elements

Additional advice on labelling
GHS label elements, including precautionary statements: none

Hazards not otherwise classified
No information available.

3. Composition/information on ingredients

Substances

Chemical characterization
Powder

Mineral bound:
Iron (II,III) oxide (Magnetite) > 99.4 %
CAS No. 1317-61-9

4. First-aid measures

Description of first aid measures

General information
In all cases of doubt, or when symptoms persist, seek medical advice.

After inhalation
Provide fresh air. In case of irregular breathing or respiratory arrest provide artificial respiration. If experiencing respiratory symptoms: Call a doctor.

After contact with skin
Wash with plenty of water. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes
Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy...
to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

**After ingestion**
Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person or a person with cramps. Call a physician immediately.

**Most important symptoms and effects, both acute and delayed**
Dust is irritating to the respiratory tract. Inhalation of fumes may cause metal fume fever, which is characterized by flu-like symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count. Ingestion may cause severe and permanent damage to the digestive tract. May cause liver damage. Causes severe pain, nausea, vomiting, diarrhea and shock. May cause hemorrhaging of the digestive tract.

**Indication of any immediate medical attention and special treatment needed**
Treat symptomatically.

### 5. Fire-fighting measures

**Extinguishing media**
- **Suitable extinguishing media**
  Co-ordinate fire-fighting measures to the fire surroundings.
- **Unsuitable extinguishing media**
  Carbon dioxide (CO2).

**Specific hazards arising from the chemical**
- Non-flammable.
- In case of fire: Gases/vapours, irritant; Gases/vapours, toxic.

**Special protective equipment and precautions for fire-fighters**
Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

**Additional information**
Knock down dust with water spray jet. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Provide adequate ventilation. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Remove persons to safety.

**Environmental precautions**
No special environmental measures are necessary.

**Methods and material for containment and cleaning up**
Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal. Collect in closed containers for disposal.

**Reference to other sections**
- Safe handling: see section 7
- Personal protection equipment: see section 8
- Disposal: see section 13

### 7. Handling and storage

**Precautions for safe handling**
- **Advice on safe handling**
  Avoid dust formation. Do not breathe dust. Wear personal protection equipment. Avoid contact with skin, eyes and clothes. Avoid: Generation/formation of dust

**Advice on protection against fire and explosion**
Usual measures for fire prevention.
Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep container tightly closed.

Hints on joint storage
Do not store together with: Aluminium, Carbon dioxide, BF5, calcium hypochlorite, Cs2C2, ethylene oxide; oxirane, hydrazine, HCOOOH (Methaneperoxoic acid).

Further information on storage conditions
Do not store at temperatures over: 60 °C / 140°F

8. Exposure controls/personal protection

Control parameters

Exposure limits

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>l/cc</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>1309-37-1</td>
<td>Iron oxide (Fe2O3) (respirable fraction)</td>
<td></td>
<td>5</td>
<td>5</td>
<td>TWA (8 h)</td>
<td>ACGIH-2019</td>
</tr>
<tr>
<td>1309-37-1</td>
<td>Iron oxide dust and fume (as Fe)</td>
<td></td>
<td>5</td>
<td>5</td>
<td>TWA (8 h)</td>
<td>REL</td>
</tr>
</tbody>
</table>

Exposure controls

Appropriate engineering controls
If handled uncovered, arrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

Protective and hygiene measures
Do not breathe dust. Avoid dust formation. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes.

Eye/face protection
Wear eye protection/face protection.
Suitable eye protection: Dust protection goggles.

Hand protection
Wear suitable gloves.

Skin protection
Wear suitable protective clothing.

Respiratory protection
In case of inadequate ventilation wear respiratory protection. Respiratory protection necessary at: exceeding exposure limit values. Suitable respiratory protective equipment: particulates filter device (DIN EN 143), half-mask with filter (DIN EN 149). Filtering device with filter or ventilator filtering device of type: P 2

Environmental exposure controls
No special environmental measures are necessary.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: Powder
Color: red brown - black
Odor: odourless
### Changes in the physical state
- Melting point/freezing point: not determined
- Initial boiling point and boiling range: not determined
- Flash point: not applicable

### Flammability
- **Solid**: not determined
- **Gas**: not applicable

### Explosive properties
- The product is not: Explosive.
- Lower explosion limits: not determined
- Upper explosion limits: not determined
- Ignition temperature: not determined

### Auto-ignition temperature
- **Solid**: not determined
- **Gas**: not applicable

### Decomposition temperature: not determined

### Oxidizing properties
- Not oxidising.

### Solubility in other solvents
- not determined

### Partition coefficient: not determined

### Viscosity / dynamic: not applicable

### Viscosity / kinematic: not applicable

### Vapor density: not determined

### Evaporation rate: not determined

### Other information
- Odour threshold: not applicable

### 10. Stability and reactivity

#### Reactivity
- No hazardous reaction when handled and stored according to provisions.

#### Chemical stability
- **Stability**: Stable
  - The product is stable under storage at normal ambient temperatures.

#### Possibility of hazardous reactions
- Hazardous reactions: Will not occur

#### Conditions to avoid
- heat.
Incompatible materials
Aluminium, Carbon dioxide., BF5, calcium hypochlorite, Cs2C2, ethylene oxide; oxirane, hydrazine, HCOOOH (Methaneperoxoic acid).

Hazardous decomposition products
In case of fire: Gases/vapours, irritant; Gases/vapours, toxic.

11. Toxicological information

Information on toxicological effects

Route(s) of Entry
Inhalation, oral, dermal, Eye contact.

Acute toxicity
Based on available data, the classification criteria are not met.

Irritation and corrosivity
Based on available data, the classification criteria are not met.

Sensitizing effects
Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - single exposure
Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - repeated exposure
Based on available data, the classification criteria are not met.

Carcinogenicity (OSHA): Not listed.
Carcinogenicity (IARC): Not listed.
Carcinogenicity (NTP): Not listed.

Aspiration hazard
Based on available data, the classification criteria are not met.

12. Ecological information

Ecotoxicity
The product is not: Ecotoxic.

Persistence and degradability
The methods for determining the biological degradability are not applicable to inorganic substances.

Bioaccumulative potential
The product has not been tested.

Mobility in soil
The product has not been tested.

Other adverse effects
No information available.

Further information
Avoid release to the environment.

13. Disposal considerations

Waste treatment methods

Disposal recommendations
Dispose of waste according to applicable legislation.
Contaminated packaging
Wash with plenty of water. Completely emptied packages can be recycled.

14. Transport information

US DOT 49 CFR 172.101
Proper shipping name: No dangerous good in sense of this transport regulation.
Marine transport (IMDG)
UN number: No dangerous good in sense of this transport regulation.
UN proper shipping name: No dangerous good in sense of this transport regulation.
Transport hazard class(es): No dangerous good in sense of this transport regulation.
Packing group: No dangerous good in sense of this transport regulation.
Air transport (ICAO-TI/IATA-DGR)
UN number: No dangerous good in sense of this transport regulation.
UN proper shipping name: No dangerous good in sense of this transport regulation.
Transport hazard class(es): No dangerous good in sense of this transport regulation.
Packing group: No dangerous good in sense of this transport regulation.

Environmental hazards
ENVIRONMENTALLY HAZARDOUS: no

Special precautions for user
No information available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not applicable

15. Regulatory information

U.S. Regulations
National Inventory TSCA
CAS No. 1317-61-9: Yes.

State Regulations
Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)
This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information

Hazardous Materials Information Label (HMIS)
Health: 1
Flammability: 0
Physical Hazard: 0

NFPA Hazard Ratings
Health: 1
Flammability: 0
Reactivity: 0
Unique Hazard:
Revision date: 06.04.2020
Revision No: 1,00

Abbreviations and acronyms
ACGIH: American Conference of Governmental Industrial Hygienists
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.