

**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**Magnetite**

Revision date: 06.04.2020

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**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@powdertechologyinc.com  
Internet: http://www.powdertechologyinc.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) &gt; 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

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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 (CO<sub>2</sub>).

### 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.

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#### 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., BF<sub>5</sub>, calcium hypochlorite, Cs<sub>2</sub>C<sub>2</sub>, 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

CAS No.	Substance	ppm	mg/m <sup>3</sup>	f/cc	Category	Origin
1309-37-1	Iron oxide (Fe <sub>2</sub> O <sub>3</sub> ) (respirable fraction)		5		TWA (8 h)	ACGIH-2019
1309-37-1	Iron oxide dust and fume (as Fe)	-	5		TWA (8 h)	REL

#### 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.

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these 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

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pH-Value: not determined

#### 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.

Vapor pressure: not applicable

Density: 5,24 g/cm<sup>3</sup>

Water solubility: practically insoluble

#### 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

No known hazardous reactions.

#### Conditions to avoid

heat.

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#### 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.

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**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:

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**Abbreviations and acronyms**

ACGIH: American Conference of Governmental Industrial Hygienists



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CFR: Code of Federal Regulations  
DOT: Department of Transportation  
ICAO: International Civil Aviation Organization  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IARC: International Agency for Research on Cancer  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
CAS: Chemical Abstracts Service  
NFPA: National Fire Protection Association  
NTP: National Toxicology Program  
OSHA: Occupational Safety and Health Administration  
PEL: permissible exposure limit  
REL: recommended exposure limit  
SARA: Superfund Amendments and Reauthorization Act  
STEL: Short-term exposure limit  
TSCA: Toxic Substances Control Act  
TWA: time-weighted average  
TI: Technical Instructions  
DGR: Dangerous Goods Regulations  
UN: United Nations  
ATE: Acute toxicity estimate  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%  
LL50: Lethal loading, 50%  
EL50: Effect loading, 50%  
EC50: Effective Concentration 50%  
ErC50: Effective Concentration 50%, growth rate  
NOEC: No Observed Effect Concentration  
BCF: Bio-concentration factor  
MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
IBC: Intermediate Bulk Container  
VOC: Volatile Organic Compounds

#### Other data

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.