

SECTION 1: Identification of the substance/mixture

1.1. Product identifier

Product form	: Substance
Substance name	: Black Iron Oxide
Formula	: FE_3O_4
Molecular weight	: 231.53 g/mol
CAS No.	: 1317-61-9
Product code	: LW-FE3O4
Synonyms	: Magnetite

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Pigment, Laboratory chemicals, Synthesis of substances

1.3. Emergency telephone number

Emergency number : 1.800.424.9300 (USA)
+1.703.527.3887 (INT)

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2. GHS Label elements, including precautionary statements

None

2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

none

SECTION 3: Composition/information on ingredients

3.1. Substances

Formula	: FE_3O_4
Synonyms	: Magnetite
Molecular Weight	: 231.53 g/mol
CAS-No.	: 1317-61-9

No ingredients are hazardous according to OSHA criteria.

No components need to be disclosed according to the applicable regulations.

SECTION 4: Description of first aid measures

Black Iron Oxide

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

4.1. Description of first aid measures

- First-aid measures after inhalation : If breathed in, move person into fresh air. If not breathing, give artificial respiration.
- First-aid measures after skin contact : Wash off with soap and plenty of water.
- First-aid measures after eye contact : Flush eyes with water as a precaution.
- First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2. Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3. Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Iron oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4. More Information

No data available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist or gas.

For personal protection see section 8.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

For disposal see section 13.

Black Iron Oxide

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2. Exposure controls

Appropriate engineering controls : General industrial hygiene practice.

8.3. Personal protective equipment

- Eye protection : Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- Skin Protection : Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
- Body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Respiratory protection : Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- Environmental exposure controls : Do not let product enter drains.

Black Iron Oxide

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	: Form: powder Color: black
Odor	: odourless
Odor Threshold	: No data available
pH	: No data available
Melting point/freezing point	: Melting point/range: 1,538 °C (2,800 °F) - lit.
Initial boiling point and boiling range	: No data available
Flash point	: Not applicable
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper/lower flammability or explosive limits	: No data available
Vapor pressure	: No data available
Vapor density	: No data available
Relative density	: 4.8 - 5.1 g/mL at 25 °C (77 °F)
Water solubility	: no data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other safety information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Black Iron Oxide

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

No data available

10.4. Conditions to avoid

Chloroformates, Peroxides, Strong acids

10.5. Incompatible materials

Strong acids, Peroxides, Chloroformates

10.6. Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	:	LD50 Oral - rat - male and female - > 5,000 mg/kg Inhalation: no data available Dermal: no data available no data available
Skin corrosion/irritation	:	Skin - Rabbit Result: No skin irritation (OECD Test Guideline 404)
Serious eye damage/irritation	:	Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405)
Respiratory or skin sensitization	:	- guinea pig Result: Did not cause sensitization on laboratory animals.
Germ cell mutagenicity	:	Hamster Lungs Result: negative
Carcinogenicity		
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.
ACGIH:	:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP:	:	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen

Black Iron Oxide

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

OSHA:	: No component of this product present at levels greater than or equal to 0.1% is identified as a by OSHA.
Reproductive toxicity	: No data available
Specific target organ toxicity (single exposure)	: No data available
Specific target organ toxicity (repeated exposure)	: No data available
Aspiration hazard	: No data available
Additional Information	: RTECS: Not available
	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1. Toxicity	: No data available
12.2. Persistence and degradability	: No data available
12.3. Bioaccumulative potential	: No data available
12.4. Mobility in soil	: No data available
12.5. Results of PBT and vPvB assessment	: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
12.6. Other adverse effects	: No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product	: Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated Packaging	: Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Black Iron Oxide

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Not dangerous goods

SECTION 15: Regulatory information

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

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.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

Triiron tetraoxide	CAS-No.	Revision Date
	1317-61-9	

Pennsylvania Right To Know Components

Triiron tetraoxide	CAS-No.	Revision Date
	1317-61-9	

New Jersey Right To Know Components

Triiron tetraoxide	CAS-No.	Revision Date
	1317-61-9	

California Prop. 65 Components

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

SECTION 16: Other information

HMIS Rating

Health Hazard	:	0
Chronic Health Hazard	:	
Flammability	:	0
Physical Hazard	:	0

NFPA Rating

Health hazard	:	0
Fire Hazard	:	0
Reactivity Hazard	:	0

Black Iron Oxide

Safety Data Sheet

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Further Information

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and Issuer assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his/her application.