

Iron(II,III)oxide powder

Revision Date:	11/10/2017
Date Issued:	3/29/2018

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY / UNDERTAKING

Product name Product code CAS REACH No. :	Iron(II,III)oxide powder, Magnetite NO-0049 1317-61-9 A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
Identified uses	Laboratory chemicals, Manufacture of substances
Supplier	IoLiTec Ionic Liquids Technologies GmbH Salzstrasse 184 D – 74076 Heilbronn Germany
Telephone	+49 (0)7131-89839-0
Fax	+49 (0)7131-89839-109
Emergency telephone Email	+49 (0)176-84850874 msds@iolitec.de

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification (REGULTATION (EC) No 1272/2008)
Skin irritation, Category 2, H315
Eye irritation, Category 2, H319
Harmful if inhaled, (Category 4), H332
Specific target organ toxicity - single exposure (Category 3), H335



Iron(II,III)oxide powder

Revision Date:	11/10/2017
Date Issued:	3/29/2018

Classification (67/548/EEC or 1999/45/EC)

Harmful by inhalation. Irritating to eyes, respiratory system and skin.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008, GHS)

Pictogram

Signal word

Warning

Hazard statement(s)	
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
Precautionary statement(s)	
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280	Wear protectic gloves/protective clothing/eye protection/face protection .
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for
	several minutes. Remove contact lenses, if
	present and easy to do. Continue rinsing.

Labelling (67/548/EEC or 1999/45/EC)

Hazard symbol(s)



R-phrase(s)

R36/37/38

Irritating to eyes, respiratory system and skin.



Iron(II,III)oxide powder

Revision Date:	11/10/2017
Date Issued:	3/29/2018

S-phrase(s) S26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection.

3 COMPOSITION / INFORMATION ON INGREDIENTS

ContentsHealth(Class)Risk(R/No.)98+%Substance not yet fully tested!

Formula

Iron(II,III)oxide

 Fe_3O_4

Molecular Weight 231.54 g/mol

4 FIRST AID MEASURES

General	Contaminated clothing should be removed
	and washed before being reused.
Inhalation	Move the exposed person to fresh air at once.
	If respiratory problems, artificial respiration/
	oxygen.
Ingestion	Immediately rinse mouth and provide fresh
	air. Do not induce vomiting. Get medical
	attention immediately.
Skin	Wash the skin immediately with soap and
	water.
Eyes	Promptly wash eyes with plenty of water while
	lifting the eye lids. Continue to rinse for at
	least 15 minutes. Get medical attention
	immediately. Continue to rinse.



Iron(II,III)oxide powder

Revision Date:	11/10/2017
Date Issued:	3/29/2018

5 FIRE FIGHTING MEASURES

Extinguishing media	Suitable: Noncombustible. Use extinguishing
	media appropriate to surrounding fire
	conditions.
Special fire fighting procedures	No special procedures required.
Unusual fire & explosion hazards	Emission of toxic fumes
Protective measures in fire	Wear self-contained breathing apparatus as
	combustion may produce hazardous fumes.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions during spill	Wear protective clothing and avoid inhalation of powder, fume and vapor as well as skin or eye contact.
Precautions to protect	
environment	Avoid washing into water courses. Avoid contaminating public drains or water supply.
Spill cleanup methods	Avoid contact with skin or inhalation of spillage, dust or vapor, Avoid dust formation. Collect and reclaim or dispose in sealed containers in license waste. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate.



Iron(II,III)oxide powder

Revision Date:	11/10/2017
Date Issued:	3/29/2018

7 HANDLING AND STORAGE

Handling precautions	Do not breathe dust. Avoid contact with eyes,
	skin, and clothing. Avoid prolonged or
	repeated exposure.
Storage precautions	Keep closed. Store at moderate temperatures
	in dry, well ventilated area.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P2 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).



Iron(II,III)oxide powder

Revision Date:	11/10/2017
Date Issued:	3/29/2018

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid
Odor/taste	No characteristic odor.
Melting Point	1,538 °C
SG/Density	~5 g/cm ³

10 STABILITY AND REACTIVITY

Stability	No particular stability concerns.
Conditions to avoid	Strong acids, peroxides, Chloroformates.
Hazardous Decomposition	
Products	Consistency of decomposition products
	unknown

11 TOXICOLOGICAL INFORMATION

Acute toxicity LD50, oral, Rat male and female	> 5000 mg/kg
Skin corrosion/irritation	
Skin-rabbit	Result: No skin irritation
	(OECD Test Guideline 404)
Serious eye damage/eye irritation	
Eyes-rabbit	Result: No eye irritation
	(OECD Test Guideline 405)
Respiratory or skin sensitization	
Guinea pig	Result: Did not cause sensitisation on
	laboratory animals.
Germ cell mutagenicity	
Hamster- Lungs	Result: negative



Iron(II,III)oxide powder

Revision Date:	11/10/2017
Date Issued:	3/29/2018

Carcinogenicity no data available Reproductive toxicity	
no data available	
Specific target organ toxicity - sing	le exposure
no data available	
Specific target organ toxicity - repeated exposure	
no data available	
Aspiration hazard	
no data available	
Potential health effects	
Ingestion	Harmful if swallowed.
Inhalation	May be harmful if inhaled. Material may be

	irritating to mucous membranes and upper
	respiratory tract.
Skin	May cause irritation
Eyes	May cause irritation

Additional Information

RTECS: Not available

Full Data on the toxicity of this product are not available. Hazardous properties cannot be excluded.

12 ECOLOGICAL INFORMATION

Do not allow material to be released to the environment without proper governmental permits.



Iron(II,III)oxide powder

Revision Date:	11/10/2017
Date Issued:	3/29/2018

13 DISPOSAL CONSIDERATIONS

Disposal method Contact specialist disposal companies. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Dispose of in accordance with Local Authority requirements. Recover and reclaim or recycle, if practical.

14 TRANSPORT INFORMATION

General	Not classified as dangerous for transport
	purposes.
Road transport notes	Not classified as dangerous for road transport.
Rail transport notes	Not classified as dangerous for rail transport.
Sea transport notes	Not classified as dangerous for sea transport.
Air transport notes	Not classified as dangerous for air transport.

15 REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

Chemical Safety Assessment

no data available

Country specific information: Germany

Classification according to German Regulation VwVwS; Reg.no. 751: non hazardous to waters.



Iron(II,III)oxide powder

Revision Date:	11/10/2017
Date Issued:	3/29/2018

16 OTHER INFORMATION

DISCLAIMER

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPOSED TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. IOLITEC SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. THIS INFORMATION RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR ANY PROCESS. IT IS THE USERE'S RESPONISIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY OF SUCH INFORMATION FOR HIS OWN PARTICULAR USE.

IN NO WAY SHALL IOLITEC BE LIABLE FOR ANY CLAIMS, LOSSES OR DAMAGES OF ANY THIRD PARTY OR FOR THE LOST PROFITS OR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES, HOWSOEVER ARISING, EVEN IF THE COMPANY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.