

Material Safety Data Sheet

Zirconium carbide powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

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

Product name	Zirconium carbide powder
Product code	NC-0006
CAS	12070-14-3
REACH No. :	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	+49 (0)176-84850874
Email	msds@iolitec.de

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULTATION (EC) No 1272/2008)

Flammable solids, Category 1, H228

Acute toxicity (dermal), Category 4, H312

Acute toxicity (inhalation), Category 4, H332

Acute toxicity (oral), Category 4, H302

Material Safety Data Sheet

Zirconium carbide powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

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

Highly flammable, Harmful by inhalation, in contact with skin and if swallowed.

2.2 Label elements

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

Pictogram



Signal word

Warning

Hazard statement(s)

H228

Flammable solid.

H302

Harmful if swallowed.

H312

Harmful in contact with skin.

H332

Harmful if inhaled.

Precautionary statement(s)

P210

Keep away from heat/sparks/open flames/hot surfaces . - No smoking.

P240

Ground/bond container and receiving equipment.

P280

Wear protectic gloves/protective clothing/eye protection/face protection

Supplemental Hazard Statements none

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

Hazard symbol(s)



Material Safety Data Sheet

Zirconium carbide powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

R-phrases(s)

R 11 Highly flammable.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

S-phrases(s)

S16 Keep away from sources of ignition - No smoking.
S27 Take off immediately all contaminated clothing.
S33 Take precautionary measures against static discharges.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name	Contents	Health(Class)	Risk(R/No.)
Zirconium carbide	97%		Substance not yet fully tested!
Formula	Molecular Weight		
ZrC	103.23 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.

Material Safety Data Sheet

Zirconium carbide powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

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.

5 FIRE FIGHTING MEASURES

Extinguishing media	Water spray, carbon dioxide, dry chemical powder, or appropriate foam.
Special fire fighting procedures	No special procedures required.
Unusual fire & explosion hazards	Emission of toxic fumes under fire conditions.
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 protective mask. Avoid inhalation of powder, fume and vapor as well as skin or eye contact.
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.

Material Safety Data Sheet

Zirconium carbide powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

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 tightly closed. Store in a cool dry place.

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 P1 (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).

Material Safety Data Sheet

Zirconium carbide powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid
Melting Point	2700°C
SG/Density	6.73 g/m ³

10 STABILITY AND REACTIVITY

Stability	No particular stability concerns.
Conditions to avoid	Strong oxidizing agents.
Hazardous Decomposition	Hazardous decomposition products: not known.

11 TOXICOLOGICAL INFORMATION

Acute toxicity	no data available
Skin corrosion/irritation	no data available
Serious eye damage/eye irritation	no data available
Respiratory or skin sensitization	no data available
Germ cell mutagenicity	no data available
Carcinogenicity	no data available
Reproductive toxicity	no data available
Specific target organ toxicity - single exposure	no data available

Material Safety Data Sheet

Zirconium carbide powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

Ingestion May be harmful if swallowed.

Inhalation May be harmful if inhaled. Material is 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.

13 DISPOSAL CONSIDERATIONS

Disposal method Contact specialist disposal companies. Dispose of in accordance with Local Authority requirements. Recover and reclaim or recycle, if practical.

Material Safety Data Sheet

Zirconium carbide powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

14 TRANSPORT INFORMATION

UN number: UN 3178

UN proper shipping name

ADR/RID: FLAMMABLE SOLID, INORGANIC, N.O.S
ZIRCONIUM CARBIDE

IMDG: FLAMMABLE SOLID, INORGANIC, N.O.S
ZIRCONIUM CARBIDE

IATA: Flammable solid, inorganic, n.o.s., zirconium
carbide

Transport hazard class(es)

ADR/RID: 4.1

IMDG: 4.1

IATA: 4.1

Packaging group

ADR/RID: II

IMDG: II

IATA: II

Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

Material Safety Data Sheet

Zirconium carbide powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

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

WGK 1 – low hazardous to waters (self classification)

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 USER'S RESPONSIBILITY 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.