

Safety Data Sheet

Titanium carbide

Revision Date: 03/01/2016

Date Issued: 9/11/2018

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

Product name	Titanium carbide
Product code	NC-0004
CAS	12070-08-5
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 (REGULATION (EC) No 1272/2008)

Flammable solids, Category 2, H228

Specific Target Organ Toxicity - Single exposure: Respiratory tract irritation,
Category 3, H335

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

Flammable solid

2.2 Label elements

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

Pictogram



Signal word

Warning

Hazard statement(s)

H228

Flammable solid.

H335

May cause respiratory irritation.

Precautionary statement(s)

P210

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

P261

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray .

P280

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

P370 + P378

In case of fire: Use CO₂, powder or water spray for extinction

Caution - substance not yet tested completely.

Supplemental Hazard Statements none

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

Hazard symbol(s)



R-phrases(s)

R 11

Highly flammable.

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S-phrase(s)

- S16 Keep away from sources of ignition - No smoking.
- S 33 Take precautionary measures against static discharges.
- S 24/25 Avoid contact with skin and eyes.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name	Contents	Health(Class)	Risk(R/No.)
Titanium carbide	>99%		Substance not yet fully tested!
Formula	Molecular Weight		
TiC	59.91 g/mol		

4 FIRST AID MEASURES

- Inhalation** Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/ oxygen. Get medical attention.
- 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.

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5 FIRE FIGHTING MEASURES

Extinguishing media	Sand, dry powder, extinguishing media for metal powder fired. Do not use water.
Special fire fighting procedures	Use CO2, powder or water spray for extinction.
Unusual fire & explosion hazards	Emission of toxic fumes under fire conditions. Dust and fumes may be a fire and explosion hazard when exposed to high temperatures or ignition sources.
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.

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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.

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).

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Exposure limits

TiC	mg/m ³
Switzerland OEL	5

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid
Melting Point	~ 3140 °C
Boiling Point	4820 °C
SG/Density	4.93 g/cm ³
Solvability	< 10 mg/l (20°C) in water

10 STABILITY AND REACTIVITY

Stability	No particular stability concerns.
Conditions to avoid	Strong oxidizing agents, acids, bases.
Hazardous Decomposition	Hazardous decomposition products: Carbon monoxide, titanium, titanium oxide.

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

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Germ cell mutagenicity

no data available

Carcinogenicity

no data available

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

Potential health effects

Ingestion

May be 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.

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13 DISPOSAL CONSIDERATIONS

Disposal method

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

14 TRANSPORT INFORMATION

UN number: UN 3178

UN proper shipping name

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

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

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

Transport hazard class(es)

ADR/RID: 4.1

IMDG: 4.1

IATA: 4.1

Packaging group

ADR/RID: III

IMDG: III

IATA: III

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Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

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 3 - hazardous to waters (self classification)

16 OTHER INFORMATION

DISCLAIMER

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