

Titanium Oxide powder rutile

Revision Date: 10/10/2018 Date Issued: 10/10/2018

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

Product name Titanium Oxide powder rutile

 Product code
 NO-0046

 CAS
 1317-80-2

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 <u>msds@iolitec.de</u>

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULTATION (EC) No 1272/2008)

Acute toxicity (inhalation), Category 4, H332

Serious eye damage/Eye irritation, Category 2, H319

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

NO-0046 Page: 1/9



Titanium Oxide powder rutile

Revision Date: 10/10/2018 Date Issued: 10/10/2018

Category 3, H335

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)

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.

Caution - substance not yet tested completely.
Supplemental Hazard Statements none

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

Hazard symbol(s)



NO-0046 Page: 2/9



Titanium Oxide powder rutile

Revision Date: 10/10/2018 Date Issued: 10/10/2018

R-phrase(s)

R20 Harmful by inhalation.

R36/37/38 Irritating to eyes, respiratory system and skin.

S-phrase(s)

S26 In case of contact with eyes, rinse immediately

with plenty of water and seek medical advice.

S36 Wear suitable protective clothing.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name Contents Health(Class) Risk(R/No.)

Titanium(IV)oxide 99.5% Substance not yet fully tested!

Formula Molecular Weight

TiO₂ 79.9 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

NO-0046 Page: 3/9



Titanium Oxide powder rutile

Revision Date: 10/10/2018 Date Issued: 10/10/2018

least 15 minutes. Get medical attention

immediately. Continue to rinse.

5 FIRE FIGHTING MEASURES

Extinguishing mediaUse 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.

Spill cleanup methodsAvoid 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.

NO-0046 Page: 4/9



Titanium Oxide powder rutile

Revision Date: 10/10/2018 Date Issued: 10/10/2018

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 container 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-

NO-0046 Page: 5/9



Titanium Oxide powder rutile

Revision Date: 10/10/2018 Date Issued: 10/10/2018

P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Exposure limits

TiO ₂	mg/m ³
Poland NDS	10; 30-NDSCh
Denmark TWA	6
Germany OEL	6
Norway OEL	5
Switzerland OEL	6
United Kingdom TWA	10

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance Solid

Color White

Melting Point 1850°C

Solubility Insoluble

10 STABILITY AND REACTIVITY

Stability No particular stability concerns.

Conditions/materials to avoid Strong acids

Hazardous Decomposition Hazardous products of decomposition: Not

known

11 TOXICOLOGICAL INFORMATION

Acute toxicity

NO-0046 Page: 6/9



Titanium Oxide powder rutile

Revision Date: 10/10/2018
Date Issued: 10/10/2018

LD50, oral, Rat > 10000 mg/kg LD50, skin, rabbit > 10000 mg/kg

Skin corrosion/irritation

Skin-Human Result: Mild skin irritation-3 h

Serious eye damage/eye irritation

Eyes-rabbit Result: No eye irritation

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

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 irritationEyes May cause irritation

Additional Information

RTECS: Not available

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

NO-0046 Page: 7/9



Titanium Oxide powder rutile

Revision Date: 10/10/2018 Date Issued: 10/10/2018

12 ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish

LC50-other fish > 1.000 mg/l-96 h

Toxicity to daphnia and other aquatic invertebrates

EC50-Daphnia magna (Water flea) > 1.000 mg/l-48 h

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

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 notesNot classified as dangerous for road transport.

Rail transport notes Not classified as dangerous for rail transport.

Sea transport notesNot classified as dangerous for sea transport.

Air transport notesNot classified as dangerous for air transport.

NO-0046 Page: 8/9



Titanium Oxide powder rutile

Revision Date: 10/10/2018 Date Issued: 10/10/2018

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. 1345: non hazardous to waters

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 RESPONISIBILTY 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.

NO-0046 Page: 9/9