

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 3.0 Revision Date 14.01.2009

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

Product name : Titanium(IV) oxide

Product Number : 72562
Brand : Fluka

Company : Sigma-Aldrich
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2. HAZARDS IDENTIFICATION

Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 1999/45/EC.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Titanium dioxide
Titania

Formula : O₂Ti

Molecular Weight : 79,87 g/mol

CAS-No.	EC-No.	Index-No.	Classification	Concentration
Titanium dioxide				
13463-67-7	236-675-5	-	-	-

4. FIRST AID MEASURES

If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

The product itself does not burn.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions**

Avoid dust formation.

Methods for cleaning up

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

7. HANDLING AND STORAGE**Handling**

Provide appropriate exhaust ventilation at places where dust is formed.

Storage

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Personal protective equipment****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).

Hand protection

For prolonged or repeated contact use protective gloves.

Eye protection

Safety glasses

Hygiene measures

General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form	powder
Colour	white
Odour	odourless

Safety data

pH	no data available
Melting point	> 350 °C
Boiling point	no data available
Flash point	not applicable
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Density	4,26 g/mL at 25 °C
Water solubility	no data available

10. STABILITY AND REACTIVITY

Storage stability

Stable under recommended storage conditions.

Materials to avoid

Strong acids

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

LD50 Oral - rat - > 10.000 mg/kg

LD50 Dermal - rabbit - > 10.000 mg/kg

Irritation and corrosion

Skin - Human - Mild skin irritation - 3 h

Eyes - rabbit - No eye irritation

Sensitisation

Will not occur

Chronic exposure

Carcinogenicity - rat - Inhalation

Tumorigenic: Carcinogenic by RTECS criteria. Lungs, Thorax, or Respiration: Tumors.

Carcinogenicity - rat - Intramuscular

Tumorigenic: Neoplastic by RTECS criteria. Blood: Lymphomas including Hodgkin's disease.

Tumorigenic: Tumors at site of application.

IARC: Group 2B - The agent (mixture) is possibly carcinogenic to humans. (Titanium dioxide)

Genotoxicity in vitro - Hamster - ovary

Micronucleus test

Genotoxicity in vitro - Hamster - Lungs

DNA inhibition

Genotoxicity in vitro - Hamster - ovary

Sister chromatid exchange

Genotoxicity in vivo - mouse - Intraperitoneal

Micronucleus test

Potential Health Effects**Inhalation**

May be harmful if inhaled. May cause respiratory tract irritation.

Skin

May be harmful if absorbed through skin. May cause skin irritation.

Eyes

May cause eye irritation.

Ingestion

May be harmful if swallowed.

12. ECOLOGICAL INFORMATION**Elimination information (persistence and degradability)**

no data available

Ecotoxicity effects

Toxicity to fish

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

Toxicity to daphnia

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

and other aquatic
invertebrates.

EC0 - Daphnia magna (Water flea) - 1.000 mg/l - 48 h

Further information on ecology

no data available

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

ADR/RID

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

Labelling according to EC Directives

Further information:

The product does not need to be labelled in accordance with EC directives or respective national laws.

16. OTHER INFORMATION

Further information

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