

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 29.07.2008

Revision: 29.07.2008

1 Identification of the substance/preparation and of the company/undertaking

· Product details

- **Trade name:** Titanium dioxide
- **Application of the substance / the preparation** Pigment

· **Manufacturer/Supplier:**

KILO Ltd
Ham Lane
Kingswinford
West Midlands
DY6 7JU
UK

Tel: 0044 1384 293222

Fax: 0044 1384 293640

e-mail: productsafety@kiloltd.co.uk

- **Further information obtainable from:** Product safety department.
- **Information in case of emergency:** Tel: 0044 1384 293222

2 Hazards identification

- **Hazard description:** Not applicable.
- **Information concerning particular hazards for human and environment:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization:**
- **CAS No. Description**
13463-67-7 Titanium dioxide
- **Identification number(s)**
- **EINECS Number:** 236-675-5
- **Additional information:** Titanium dioxide is a white inorganic pigment

4 First aid measures

- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Check for and remove any contact lenses.
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
- **Information for doctor:** Treat symptomatically and supportively.

5 Fire-fighting measures

- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards caused by the substance, its products of combustion or resulting gases:** Not combustible.
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

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- **Additional information** Prevent fire run-off water from entering surface water or ground water.

6 Accidental release measures

- **Person-related safety precautions:**
 - Avoid formation of dust.
 - Ensure adequate ventilation
 - Product forms slippery surface when combined with water.
- **Measures for environmental protection:**
 - Do not allow product to reach sewage system or any water course.
 - Do not allow to penetrate the ground/soil.
 - Even at low concentrations the product renders the discharge in liquid effluent highly visible.
- **Measures for cleaning/collecting:**
 - Pick up mechanically.
 - Send for recovery or disposal in suitable receptacles.
- **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
 - Prevent formation of dust.
 - Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

13463-67-7 Titanium dioxide	
WEL	Long-term value: 10* 4** mg/m ³

- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
 - Select PPE appropriate for the operations taking place taking into account the product properties.
- **General protective and hygienic measures:**
 - Wash hands before breaks and at the end of work.
 - Avoid close or long term contact with the skin.
 - Do not eat, drink, smoke or sniff while working.
 - Ensure that washing facilities are available at the work place.
 - Avoid contact with the eyes.
 - Do not breath dust
- **Respiratory protection:**
 - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**
 - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
 - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

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- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing

9 Physical and chemical properties

· General Information

Form:	Powder
Colour:	White
Odour:	Odourless

· Change in condition

Melting point/Melting range:	>1800°C
Boiling point/Boiling range:	>2500°C

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Product is not flammable.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density at 20°C:** ca.3.8 g/cm³

· **Bulk density at 20°C:** ca.500 kg/m³

· **Solubility in / Miscibility with water:** Insoluble.

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· Acute toxicity:

· LD/LC50 values relevant for classification:

Oral	LD50	>20000 mg/kg (rat)
Dermal	LD50	>10000 mg/kg (rabbit)
Inhalative	LC50/4 h	>6.82 mg/l (rat)

· Primary irritant effect:

- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.

· **Sensitization:** No sensitizing effects known.

· Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

The substance is not subject to classification according to the latest version of the EU lists.

The product is not irritant, but it strongly colours and as with all fine powders can absorb moisture and natural oils from the surface of the skin during prolonged exposure.

ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation of its aerosol.

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INHALATION RISK: A nuisance-causing concentration of airborne particles can be reached quickly when dispersed.

12 Ecological information

- **Behaviour in environmental systems:**
- **Mobility and bioaccumulation potential:** Product is not expected to bioaccumulate.
- **General notes:**
Generally not hazardous for water
The product is inert, not biologically active and non-biodegradable. The mobility of solid particles in the environment is limited.
Prevent contamination of sewerage, surface and subterranean waters - the product strongly colours and due to this property it can have a detrimental optical effect.

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Contact waste processors for recycling information.
Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.
- **European waste catalogue**
Waste key numbers in accordance with the European Waste catalogue (EWC) are origin-referred defined.
Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulatory information

- **Labelling according to EU guidelines:**
The substance is not subject to classification according to EU lists and other sources of literature known to us.
Observe the general safety regulations when handling chemicals.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Product safety department.