

MATERIAL SAFETY DATA SHEET

according to 91/155/EEC
Date / revised: 09.05.1996 version 3.00
Product: Titanium Dioxide

Titanium Dioxide 77891

| (Print date: 29.04.1998)

| 1. Substance/preparation and company name

TITANIUM DIOXIDE

| 2. Composition/information on ingredients

| Chemical nature

| Titanium oxide

| CAS_No. 1317_70_0 EINECS_No. 215_280_1

| 3. Possible hazards

| Critical hazards to man and the environment:

| If breathable dust is formed: Can irritate the respiratory tract.

| 4. First aid measures

| General advice: Remove contaminated clothing.

| If inhaled: keep patient calm, remove to fresh air, summon medical help

| On skin contact: Wash thoroughly with soap and water.

| On contact with eyes: Wash affected eyes for at least 15 minutes under running water with eyelids held open.

| On ingestion: Rinse mouth and then drink plenty of water.

| 5. Fire fighting measures

| Suitable extinguishing media: water, carbon dioxide (CO₂), dry extinguishing media, foam

| Special protective equipment: In case of fire, wear a self contained breathing apparatus.

| Further information: Dispose of fire debris and contaminated extinguishing water in accordance with local regulations.

| 6. Accidental release measures

| Personal precautions: Avoid dust formation.

| Environmental precautions: Do not let product enter drains.

| Methods for cleaning up: Sweep/shovel up.

Page 2 of 3

Safety data sheet

Date / revised: 24.01.1994 version 2.00

Product: Titanium Dioxide White

| 7. Handling and storage

| Handling

| Protection against fire and explosion: Handle in accordance with good industrial hygiene and safety

practice.

| Technical protective measures: Breathing must be protected when large quantities are decanted without local exhaust ventilation

| Storage

| Keep tightly closed in a dry and cool place.

| **8. Exposure controls and personal protection**

| Additional information on the lay_out of technical plant (see 7)

| Components with workplace control parameters

| Titanium oxide:

| Observe MAK value for inert dust: 6 mg/m³

| Personal protective equipment

| Respiratory protection: if breathable dust is formed

| Hand protection: protective gloves

| Eye protection: safety glasses

| General safety and hygiene measures: The usual precautions for the

| handling of chemicals must be observed.

| Do not breathe dust.

| **9. Physical and chemical properties**

| Form: powder

| Colour: white

| Odour: odourless

| Change in physical state

| Melting point/melting range: >1000 °C

| Density: (20 °C) 3.9 g/cm³ (approx.)

| Bulk density: 500_750 kg/m³ (approx.)

| Solubility in water: sparingly soluble

| pH value: as slurry: neutral

| Other information: none

| **10. Stability and reactivity**

| Hazardous reactions: none

| Hazardous decomposition products: none

| **11. Toxicological information**

| Acute toxicity

| LD50/oral/rat: > 10 000 mg/kg

| Primary skin irritation/rabbit/: non_irritant

| Primary mucous membrane irritation/rabbits' eyes/:

non_irritant

If inhaled from dust: can irritate the respiratory tract

| **12. Ecological information**

| Elimination information

| The product is virtually insoluble in water and can thus be separated

| from water mechanically in suitable effluent treatment

plants.

| Behaviour and environmental fate
| Inhibition of degradation activity in activated sludge is
not to be

| anticipated during correct introduction of low
concentrations.

| Ecotoxic effects
| no data available

| Further ecological information

| Do not discharge product into natural waters without
pretreatment

| (biological treatment plant).

| **13. Disposal considerations**

| Product: Must be disposed of by special means, e.g.
suitable dumping

| in accordance with local regulations.

| **14. Transport information**

| Not classified as hazardous under transport regulations.

| **15. Regulatory information**

| Labelling according to EEC Directives

| not subject to labelling

| observe MAK value for inert dust 6 mg/m³

| National legislation/regulations

| Water hazard class: WGK (0) (Germany) (BASF

self_classification)

| **16. Other information**

| A backslash in the left hand margin indicates an
amendment from the previous version.

| The information contained herein is based on the present
state of our knowledge and does not therefore guarantee
certain properties.

| Recipients of our product must take responsibility for
observing existing laws and regulations.