

**MATERIAL SAFETY DATA SHEET**

Product Name: Titanium dioxide

CAS No.:13463-67-7

Version: 0

**1. Identification**

**Product Code** : 90578  
**Company Name** : Advent Chembio Private Limited  
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**Company Phone Number** : 022-27690837

**2. Composition/Information on Ingredients**

Ingredient	CAS No	Percent
TITANIUM DIOXIDE	13463-67-7	99- 100%

**3. Hazards Identification****Hazard classification****Health hazards**

Skin corrosion/irritation : Category 2  
Specific target organ toxicity - single exposure : Category 3  
Carcinogenicity : Category 2

**Labels elements****Hazard symbol**

**Signal word** : Warning  
**Hazard statement** : Causes skin irritation.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.  
Suspected of causing cancer.

**Precautionary statement**

**Prevention** : Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

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- Response** : IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- Storage** : Store locked up. Store in a well-ventilated place. Keep container tightly closed.
- Disposal** : Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
- Other hazards which do not result in GHS classification** : None.

**4. First Aid Measures**

- General information** : Get medical advice/attention if you feel unwell. If medical advice is needed, have product container or label at hand. Show this safety data sheet to the doctor in attendance.
- Ingestion** : Rinse mouth thoroughly. Call a POISON CENTER or doctor/physician if you feel unwell .
- Inhalation** : Move to fresh air. Get medical attention if symptoms persist.
- Skin contact** : Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing. Wash contaminated clothing before reuse .
- Eye contact** : Flush thoroughly with water. If irritation occurs, get medical assistance.
- Most important symptoms/effects, acute and delayed** : May cause skin irritation.
- Indication of immediate medical attention and special treatment needed** : Treat symptomatically. Symptoms may be delayed.

**5. Fire fighting measures**

- General fire hazards** : In case of fire and/or explosion do not breathe fumes .
- Suitable (and unsuitable) extinguishing media**
- Suitable extinguishing media** : Use fire-extinguishing media appropriate for surrounding materials.
- Unsuitable extinguishing media** : None known
- Specific hazards arising from the chemical** : During fire, gases hazardous to health may be formed.

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**Special protective equipment and precautions for firefighters**

- Special fire fighting procedures** : Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.
- Special protective equipment for fire-fighters** : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. Accidental Release Measures**

- Personal precautions, protective equipment and emergency procedures** : Keep unauthorized personnel away. Keep upwind. Put on protective equipment before entering danger area. Ventilate closed spaces before entering them. Avoid inhalation of dust.
- Methods and material for containment and cleaning up** : Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.
- Notification Procedures** : Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.
- Environmental precautions** : Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**7. Handling and Storage**

- Precautions for safe handling** : Avoid contact with eyes. Avoid contact with skin. Avoid inhalation of dust. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood .
- Conditions for safe storage, including any incompatibilities** : Keep container tightly closed. Keep in a cool, well-ventilated place. Store in a dry place.

**8. Exposure Controls Personal Protection**

- Control parameters**
- Occupational exposure limits : None of the components have assigned exposure limits
- Appropriate engineering controls** : No data available.
- Individual protection measures, such as personal protective equipment**
- General information** : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne

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levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. Use explosion-proof ventilation equipment.

<b>Eye/face protection</b>	:	Use tight fitting goggles if dust is generated.
<b>Hand protection</b>	:	Wear protective gloves.
<b>Other</b>	:	Wear suitable protective clothing.
<b>Respiratory protection</b>	:	In case of inadequate ventilation use suitable respirator.
<b>Hygiene measures</b>	:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower.

**9. Physical and Chemical Properties**

<b>Appearance</b>	:	White Solid Powder .
<b>Odor</b>	:	Odorless
<b>pH</b>	:	6 - 7
<b>Melting point/freezing point</b>	:	1,855 °C 1,843 °C
<b>Initial boiling point and boiling range</b>	:	2,500 °C 2,500 - 3,000 °C
<b>Flash Point</b>	:	Not applicable
<b>Vapor pressure</b>	:	No data available.
<b>Vapor density</b>	:	No data available.
<b>Relative density</b>	:	4.26 (20 °C)
<b>Solubility in water</b>	:	Soluble
<b>Solubility (other)</b>	:	Insoluble in water
<b>Formula</b>	:	O <sub>2</sub> Ti
<b>Molecular Weight</b>	:	79.9 g/mol

**10. Stability and Reactivity**

<b>Reactivity</b>	:	No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	:	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	:	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	:	Contact with incompatible materials.
<b>Incompatible materials</b>	:	Strong oxidizing agents. Metals.
<b>Hazardous decomposition products</b>	:	None known.

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**11. Toxicological Information****Information on likely routes of exposure**

- Ingestion** : May be harmful if swallowed.  
**Inhalation** : May be harmful if inhaled.  
**Skin contact** : Causes skin irritation.  
**Eye contact** : May cause irritation.

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)**

- Oral Product** : No data available.  
**Dermal Product** : No data available.  
**Inhalation Product** : No data available.  
**Repeated dose toxicity Product** : No data available.  
**Skin corrosion/irritation Product** : Causes skin irritation.  
**Serious eye damage/eye irritation Product** : May irritate eyes .  
**Respiratory or skin sensitization Product** : Not a skin sensitizer.  
**Carcinogenicity Product** : Suspected of causing cancer.  
**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans DIOXANE** : Possibly carcinogenic to humans.  
**US. National Toxicology Program (NTP) Report on Carcinogens DIOXANE** : No carcinogenic components identified.  
**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050** : No carcinogenic components identified.  
**Germ cell mutagenicity**  
**In vitro Product** : No mutagenic components identified  
**In vivo Product** : No mutagenic components identified  
**Reproductive toxicity Product** : No components toxic to reproduction
- Specific target organ toxicity - single exposure Product** : Respiratory tract irritation.  
**Specific target organ toxicity - repeated exposure Product** : No data available.  
**Aspiration hazard Product** : Not classified  
**Other effects** : No data available.

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## 12. Ecological Information

### Ecotoxicity

#### Acute hazards to the aquatic environment :

- Fish Product** : No data available.
- Aquatic invertebrates Product** : No data available.

#### Chronic hazards to the aquatic environment :

- Fish Product** : No data available.
- Aquatic invertebrates Product** : No data available.
- Toxicity to Aquatic Plants Product:** : No data available.
- Persistence and degradability**
- Biodegradation Product** : There are no data on the degradability of this product.
- BOD/COD ratio Product** : No data available.
- Bioaccumulative potential**
- Bioconcentration factor (BCF) Product** : No data available on bioaccumulation.
- Partition coefficient n-octanol / water (log Kow) Product** : No data available.
- Mobility in soil** : No data available.
- Other adverse effects** : The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

## 13. Disposal consideration

- Disposal instructions** : Discharge, treatment, or disposal may be subject to national, state, or local laws. Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
- Contaminated packaging** : Since emptied containers retain product residue, follow label warnings even after container is emptied.

## 14. Transport Information

	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
<b>DOT</b>			Not regulated		
<b>IMDG</b>			Not regulated		

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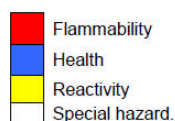
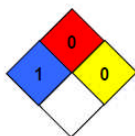
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IATA	Not regulated
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**15. Regulatory Information**

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.

**16. Other Information****NFPA Hazard ID**

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

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