



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
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admin@supremepetrochemicals.com

SAFETY DATA SHEET (SDS)

Titanium Dioxide Rutile *SDS*

REV 3.1
29 JULY 2026
GHS REV.11 (2025)

CAS **13463-67-7** EC **236-675-5** SIGNAL WORD **DANGER**

GHS08

Health Hazard

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY

Product Name	Titanium Dioxide Rutile
Product Type	Titanium dioxide pigment, rutile grade
Chemical Family	Inorganic oxide pigment
CAS No.	13463-67-7
EC No.	236-675-5
Intended Use	Industrial / professional use as listed on the SPC product page.
Restrictions on Use	Industrial / professional use only. Confirm grade suitability before regulated or consumer use.
Supplier	Supreme Petro Chemicals
Address	No. 145, 1st Floor, Raja Muthiah Road, Periyamet, Chennai – 600003, India
Emergency Contact	Sanketh — +91 86087 80096 · Sudarshan — +91 81979 47045
Email	admin@supremepetrochemicals.com
Product Page	https://www.supremepetrochemicals.com/products/titanium-dioxide-rutile
SDS Revision	July 2026
SDS Version	3.1

SECTION 2 HAZARD IDENTIFICATION

Carc. 2 (inhalation, respirable dust) – H351. Not classified for other hazard classes based on reviewed source data.



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GHS Classification	Carcinogenicity Category 2 by inhalation (respirable dust fraction)
Signal Word	WARNING
GHS Pictograms	GHS08 (Health Hazard)
Other Hazard Classes	Not classified for unlisted hazard classes based on reviewed source data.

HAZARD STATEMENTS

- H351 — Suspected of causing cancer by inhalation

PRECAUTIONARY — PREVENTION

- P201 — Obtain special instructions before use.
- P202 — Do not handle until all safety precautions have been read and understood.
- P260 — Do not breathe dust.
- P271 — Use only outdoors or in a well-ventilated area.
- P272 — Contaminated work clothing should not be allowed out of the workplace.
- P273 — Avoid release to the environment.
- P280 — Wear protective gloves / eye protection / face protection / respiratory protection.

PRECAUTIONARY — RESPONSE / STORAGE / DISPOSAL

- P304+P340 — IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P308+P313 — IF exposed or concerned: Get medical advice/attention.
- P312 — Call a POISON CENTER or doctor if you feel unwell.
- P405 — Store locked up.
- P501 — Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	EC NO.	% W/W	GHS CLASSIFICATION
Titanium dioxide (rutile)	13463– 67–7	236– 675–5	100	Carc. 2 by inhalation (H351) where applicable to respirable dust fraction

Full text of H-statements listed in Section 16.



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SECTION 4 FIRST AID MEASURES

Inhalation	Move person to fresh air immediately if dust is inhaled. Keep at rest in a comfortable position. Seek medical attention if irritation or symptoms persist.
Skin Contact	Remove contaminated clothing. Wash affected skin thoroughly with soap and water. Seek medical attention if irritation persists.
Eye Contact	Rinse cautiously with clean water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention.
Ingestion	Rinse mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical advice.
Note to Physician	Treat symptomatically based on exposure route and product hazards. No specific antidote known.

SECTION 5 FIREFIGHTING MEASURES

Suitable Extinguishing Media	Titanium dioxide is non-flammable. Use extinguishing media suitable for surrounding fire: water spray, foam, dry chemical or carbon dioxide.
Unsuitable Media	Direct high-pressure water jet where it may spread the material.
Specific Hazards	Non-combustible solid. Fine respirable dust may form irritating atmospheres. Containers may rupture when exposed to intense heat. Combustion of surrounding materials may produce irritating or toxic fumes.
Protective Equipment	Wear full protective clothing and self-contained breathing apparatus (SCBA).
Special Procedures	Evacuate non-essential personnel. Prevent contaminated run-off from entering drains and waterways. Avoid dust clouds and ignition sources in surrounding materials.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid generating dust. Wear appropriate respiratory protection (P2/FFP2 dust mask or better) and PPE. Keep unnecessary personnel away.
Environmental Precautions	Prevent entry into drains, sewers, soil and watercourses.



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Containment / Clean-up	Avoid dust generation. Carefully sweep or vacuum into labelled, sealed containers. Prevent release to drains. Collect material for disposal through an approved waste contractor.
Reference to Sections	See Section 8 for PPE, Section 13 for disposal, and Section 15 for regulatory information.

SECTION 7 HANDLING AND STORAGE

Handling Precautions	Minimise generation of respirable dust. Use enclosed handling or local exhaust ventilation. Avoid prolonged inhalation of dust.
Hygiene	Wash hands and exposed skin thoroughly after handling. Remove contaminated clothing before reuse. Do not eat, drink or smoke when using this product.
Storage Conditions	Store dry in original, tightly closed compatible containers. Inspect containers regularly for leakage or damage.
Storage Temperature	Store at ambient temperature unless supplier instructions specify otherwise.
Incompatible Materials	Strong oxidising agents, concentrated acids and halogens. Reactive with aluminium chloride (AlCl ₃) under elevated temperature — not a concern in ambient blending or storage.
Segregation	Segregate from food, drink, animal feed and incompatible chemicals.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limit	Titanium dioxide (CAS 13463–67–7): Use verified local OEL if established (e.g. NIOSH: 2.4 mg/m ³ respirable dust; ACGIH TLV: 10 mg/m ³ total dust, 3 mg/m ³ respirable); otherwise apply ALARA / good industrial hygiene practice. Confirm current regional OELs.
Engineering Controls	Use local exhaust ventilation or enclosed handling systems to control respirable dust. Ensure general dilution ventilation is adequate.
Respiratory Protection	If ventilation is inadequate or OEL may be exceeded, use a NIOSH/EN-certified P2/FFP2 or P100 particulate respirator. Use SCBA for emergencies or high-dust operations.
Hand / Eye / Skin	Gloves: chemical-resistant (nitrile, butyl or neoprene). Eye/face: EN 166/ANSI Z87.1 dust-rated safety glasses or goggles. Body: dust-



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resistant clothing and safety footwear. Provide eyewash and safety shower where applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White to off-white powder; opaque.
Odour	Odourless.
Odour Threshold	Not applicable (odourless solid).
pH	Not applicable (insoluble solid). Aqueous slurry pH ≈67 (see supplier COA).
Melting / Freezing Point	Approximately 1843 °C (rutile polymorph).
Boiling Point / Range	Not applicable (decomposes / not measurable at atmospheric pressure).
Flash Point	Not applicable — non-flammable inorganic solid.
Auto-ignition Temperature	Not applicable — non-flammable.
Flammability Limits	Not applicable — non-flammable.
Vapour Pressure	Negligible at ambient temperature (solid).
Vapour Density (air = 1)	Not applicable (solid).
Relative Density	3.9–4.2 g/cm ³ (rutile grade; confirm from supplier COA).
Solubility in Water	Practically insoluble in water; very slightly soluble in hydrofluoric acid and hot concentrated sulfuric acid.
Log Pow (Partition Coeff.)	Not applicable (inorganic substance).
Evaporation Rate	Not applicable (solid).
Viscosity	Not applicable (solid).
VOC Content	0 % (non-volatile inorganic solid).

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage and handling conditions.
Conditions to Avoid	Avoid heat, contamination and contact with incompatible materials.
Incompatible Materials	Strong oxidising agents (nitric acid, chlorine, permanganates, peroxides). Concentrated acids and halogens. Reactive with aluminium chloride (AlCl ₃) under elevated temperature — not a concern in ambient storage.
Hazardous Decomposition	Stable to very high temperatures. In fire conditions, no hazardous decomposition products anticipated from TiO ₂ itself; surrounding organic materials may produce carbon oxides and irritating fumes.



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Hazardous Reactions	No hazardous polymerisation. No hazardous reactions under normal storage and handling conditions.
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SECTION 11 TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	Low acute oral toxicity. Rat LD50 > 10 000 mg/kg (not classified). Not expected to be harmful by ingestion at normal industrial exposure levels.
Acute Dermal Toxicity	Low acute dermal toxicity. Not classified. May cause mechanical irritation to skin from abrasive particles.
Acute Inhalation Toxicity	Respirable dust is classified as suspected carcinogen (Carc. 2, H351) by inhalation in some jurisdictions (IARC Group 2B for inhaled dust). Avoid generation and inhalation of respirable dust.
Skin Irritation	Not classified as a skin irritant based on reviewed data. May cause mechanical irritation.
Eye Irritation	Not classified as an eye irritant. May cause mechanical irritation from particles; rinse if contact occurs.
Sensitisation	Not classified as a skin or respiratory sensitiser.
Carcinogenicity	IARC Group 2B: possibly carcinogenic to humans (inhaled titanium dioxide). Carc. 2 (H351) classification applies to inhalation of respirable dust fraction.
Mutagenicity	Not classified as a mutagen. No genotoxic potential identified based on reviewed data.

SECTION 12 ECOLOGICAL INFORMATION

Aquatic Toxicity	Not classified for acute or chronic aquatic toxicity based on reviewed data. Avoid release to surface waters.
Persistence / Degradability	Not applicable (inorganic substance; not biodegradable). Persistent in the environment.
Bioaccumulation	Not expected to bioaccumulate (inorganic substance; low log Kow not applicable).
Mobility in Soil	Low solubility limits mobility. Particles may migrate in suspension; prevent release to soil and groundwater.
Other Adverse Effects	Avoid uncontrolled release to the environment. Manage releases and waste under applicable local environmental regulations.



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SECTION 13 DISPOSAL CONSIDERATIONS

Waste from Product	Dispose of contents through an authorised waste contractor in accordance with local and national regulations. Assign waste code according to actual process and local regulation.
Contaminated Packaging	Empty containers may retain residues; handle as potentially hazardous until cleaned or disposed of through an approved contractor.
Indian Regulations	Follow Hazardous Waste (Management, Handling and Transboundary Movement) Rules and applicable Pollution Control Board requirements.

SECTION 14 TRANSPORT INFORMATION

PARAMETER	UN / ADR (ROAD)	IMDG (SEA)	IATA (AIR)
UN Number	Not regulated	Not regulated	Not regulated
Proper Shipping Name	Not regulated — not a dangerous good	Not regulated — not a dangerous good	Not regulated — not a dangerous good
Class	Not regulated	Not regulated	Not regulated
Packing Group	Not applicable	Not applicable	Not applicable
Marine Pollutant	No	No	No

Titanium dioxide is not classified as a dangerous good under ADR, IMDG or IATA. Use approved, compatible containers labelled with product name. Verify current carrier rules before shipment.

SECTION 15 REGULATORY INFORMATION

EU / REACH / CLP	Classified and labelled under EU CLP in accordance with the classification in Section 2. Subject to REACH registration requirements where applicable.
OSHA (USA)	Prepared in OSHA HCS/HazCom-aligned 16-section SDS format. Verify TSCA inventory / SNUR status before US import or distribution.
India	Observe applicable Indian regulations: Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules; Hazardous Waste Rules; workplace safety under Factories Act and related rules; Pollution Control Board requirements.



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Other Jurisdictions

Canada WHMIS 2015/HPR: classify and label using Section 2 classification; bilingual SDS/label may be required. China: observe applicable GB/T SDS and classification requirements. Australia: check AICS inventory status. Verify all applicable jurisdictional requirements before marketing.

SECTION 16 OTHER INFORMATION

Prepared By	Supreme Petro Chemicals — Technical Department
SDS Standard	UN GHS Rev.11 (2025); OSHA HCS/HazCom; EU CLP/REACH Annex II; Canada WHMIS/HPR — 16-section format
Revision Date	24 June 2026
Version	3.0 (supersedes prior issues)
Disclaimer	Information is given in good faith and believed accurate at issue. It does not constitute a specification or guarantee; the user is responsible for safe use, handling and compliance.

FULL TEXT OF H-STATEMENTS

- H351 — Suspected of causing cancer by inhalation.