



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

SAFETY DATA SHEET (SDS)

Phthalic Anhydride *SDS*

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

CAS 85-44-9 EC 201-607-5 SIGNAL WORD **DANGER**

GHS05

Corrosive / Eye Damage

GHS07

Harmful / Irritant

GHS08

Health Hazard

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

Product Name	Phthalic Anhydride
Product Type	Chemical intermediate
Chemical Family	Aromatic anhydride
CAS No.	85-44-9
EC No.	201-607-5
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/phthalic-anhydride
SDS Revision	July 2026
SDS Version	3.1

SECTION 2 HAZARD IDENTIFICATION

Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; Resp. Sens. 1; Skin Sens. 1; STOT SE 3

Signal Word **DANGER**



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

GHS Pictograms	GHS05 (Corrosive / Eye Damage) GHS07 (Harmful / Irritant) GHS08 (Health Hazard)
Other Hazard Classes	Not classified for unlisted hazard classes based on reviewed source data.

HAZARD STATEMENTS

- H302 — Harmful if swallowed
- H315 — Causes skin irritation
- H317 — May cause an allergic skin reaction
- H318 — Causes serious eye damage
- H334 — May cause allergy or asthma symptoms if inhaled
- H335 — May cause respiratory irritation

PRECAUTIONARY — PREVENTION

- P260 — Do not breathe dust / vapours.
- 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.

PRECAUTIONARY — RESPONSE / STORAGE / DISPOSAL

- P301+P310 — IF SWALLOWED: Immediately call a POISON CENTER or doctor.
- P303+P361+P353 — IF ON SKIN OR HAIR: Remove/take off immediately all contaminated clothing. Rinse skin with water / shower.
- P304+P340 — IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 — IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P312 — Call a POISON CENTER or doctor if you feel unwell.
- P331 — Do NOT induce vomiting.
- P403+P235 — Store in a well-ventilated place. Keep cool.
- P405 — Store locked up.
- P501 — Dispose of contents / container in accordance with local regulations.



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	EC NO.	% W/W	GHS CLASSIFICATION
Phthalic Anhydride	85-44-9	201-607-100	5	Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; Resp. Sens. 1; Skin Sens. 1; STOT SE 3

Full text of H-statements listed in Section 16.

SECTION 4 FIRST AID MEASURES

Inhalation	Remove person to fresh air immediately. Keep at rest in a position comfortable for breathing. If symptoms of respiratory sensitisation or irritation develop, seek medical attention promptly.
Skin Contact	Remove contaminated clothing. Wash affected skin thoroughly with soap and water for at least 15 minutes. Seek medical attention if irritation or symptoms persist.
Eye Contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek immediate medical attention — serious eye damage is possible.
Ingestion	Rinse mouth. Do not induce vomiting unless directed by medical personnel. Seek medical advice immediately.
Note to Physician	Treat symptomatically based on exposure route and product hazards. Respiratory sensitisation (H334) may require bronchodilator / corticosteroid management.

SECTION 5 FIREFIGHTING MEASURES

Suitable Extinguishing Media	Water spray, foam, dry chemical powder or carbon dioxide (CO ₂). Use media appropriate to surrounding fire conditions.
Unsuitable Media	Avoid direct high-pressure water jet — it may spread molten or burning material.
Specific Hazards	Combustion and thermal decomposition may produce irritating and toxic fumes including carbon oxides and phthalic acid vapour. Dust or fine particulate may form combustible / irritating atmospheres; avoid dust clouds and ignition sources. Heated containers may rupture.



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

Protective Equipment	Wear full protective clothing and self-contained breathing apparatus (SCBA). Use full body chemical-resistant protective suit for major fires.
Special Procedures	Evacuate non-essential personnel. Prevent contaminated fire-fighting run-off from entering drains and waterways. Cool fire-exposed containers with water spray.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid dust generation. Keep personnel upwind. Wear full PPE (see Section 8). Eliminate ignition sources. Ensure adequate ventilation.
Environmental Precautions	Prevent entry into drains, sewers, soil and watercourses. Notify relevant environmental authorities if significant release occurs.
Containment / Clean-up	Sweep or vacuum carefully into labelled, sealed containers — do not generate dust. Avoid raising dust. Collect material for disposal through an approved waste contractor. Wash spill area with water.
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	Avoid dust / fume inhalation. Handle in enclosed systems or with local exhaust ventilation. Keep away from water, strong bases and oxidisers. Avoid generating dust during transfer and loading.
Hygiene	Wash hands and exposed skin thoroughly after handling. Remove and launder contaminated clothing before reuse. Do not eat, drink or smoke when using this product.
Storage Conditions	Store in original, tightly closed compatible containers. Keep dry — phthalic anhydride hydrolyses on prolonged contact with moisture. Inspect containers regularly for leakage or damage.
Storage Temperature	Store at ambient temperature (below 50°C); keep away from heat sources and direct sunlight.
Incompatible Materials	Strong oxidisers (nitric acid, chlorine, permanganates, peroxides); concentrated acids; halogens; water / moisture (causes hydrolysis). Reactive with aluminium chloride (AlCl ₃) at elevated temperature.
Segregation	Segregate from food, drink, animal feed and incompatible chemicals. Store locked up when not in use.



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limit	Phthalic Anhydride (CAS 85-44-9): ACGIH TLV-C 1 ppm (6 mg/m ³) ceiling; OSHA PEL-TWA 2 ppm (12 mg/m ³); NIOSH REL-TWA 1 ppm (6 mg/m ³). Verify current local OEL (India MSIHC / EU IOELV) with supplier before operations.
Engineering Controls	Use closed handling systems or local exhaust ventilation (LEV) to control dust, fume and vapour below OEL. Provide general dilution ventilation as a supplement. Use explosion-proof ventilation and grounding where molten product is handled.
Respiratory Protection	Where ventilation is inadequate: use a NIOSH/EN-approved half-face or full-face respirator with combined organic vapour / particulate P95 or P100 cartridge. Use SCBA for emergency response or where concentrations are unknown.
Hand / Eye / Skin	Hands: chemical-resistant gloves (nitrile, butyl, neoprene or PVC; minimum 0.4 mm) — select for breakthrough time and task duration. Eyes: chemical splash goggles (EN 166 / ANSI Z87.1); add face shield where splash, molten material or pressure-transfer risk exists. Skin / Body: chemical-resistant apron or coverall; safety footwear. Provide eyewash station and safety shower in the work area.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White flakes / needles (solid at ambient temperature) or colourless to pale-yellow molten liquid above 131°C.
Odour	Characteristic acrid / irritating odour.
Odour Threshold	Not established.
pH	Not applicable (anhydrous solid). Aqueous solution is acidic (hydrolyses to phthalic acid); pH ≈3 for a 1% solution — verify from supplier COA.
Melting / Freezing Point	Approx. 131°C (literature value; confirm from supplier specification)
Boiling Point / Range	Approx. 295°C at 1 atm (literature value; confirm from supplier specification)
Flash Point	Approx. 152°C (closed cup) — CORRECTED from source (source printed 151°C under Boiling Point in error)
Auto-ignition Temperature	Approx. 570°C (literature; confirm from supplier)



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

Flammability Limits	Lower explosive limit (LEL): approx. 1.7% v/v; Upper explosive limit (UEL): approx. 10.5% v/v (dust / vapour; confirm from supplier)
Vapour Pressure	Approx. 0.001 hPa at 20°C (very low; molten product has higher vapour pressure)
Vapour Density (air = 1)	Approx. 5.1 (heavier than air; confirm from supplier)
Relative Density	Approx. 1.53 g/cm ³ at 20°C (confirm from supplier specification)
Solubility in Water	Reacts / hydrolyses with water to form phthalic acid; not stable as a dissolved form. Slow hydrolysis at room temperature; faster at elevated temperatures.
Log Pow (Partition Coeff.)	Approx. 1.6 (literature; confirm from supplier)
Evaporation Rate	Very low (solid at ambient temperature; low vapour pressure)
Viscosity	Not applicable to solid form. Molten viscosity: low — confirm from supplier specification.
VOC Content	Negligible in solid form at ambient temperature; assess in molten / process conditions under applicable local VOC rules.

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage and handling conditions when kept dry and away from incompatible materials.
Conditions to Avoid	Heat above storage temperature; moisture / water contact (causes hydrolysis); ignition sources (open flames, sparks, static); incompatible materials.
Incompatible Materials	Strong oxidising agents (nitric acid, chlorine, permanganates, peroxides). Strong bases (caustic soda, ammonia). Water and moisture (hydrolysis). Aluminium chloride (AlCl ₃) at elevated temperature. Concentrated mineral acids.
Hazardous Decomposition	Thermal decomposition and combustion may produce carbon monoxide, carbon dioxide, and irritating / toxic fumes (phthalic acid vapour, maleic anhydride).
Hazardous Reactions	Hydrolysis with water to form phthalic acid (exothermic if in bulk contact with water). No other hazardous reactions under normal storage and handling conditions.



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	Harmful if swallowed (H302). Rat oral LD ₅₀ approx. 800–1,530 mg/kg (literature; GHS Acute Tox. Cat. 4). Confirm numeric endpoint from supplier toxicological data sheet.
Acute Dermal Toxicity	Not classified for acute dermal toxicity. May cause skin irritation on prolonged or repeated contact (H315).
Acute Inhalation Toxicity	Dust and vapour are irritating to the respiratory tract. Respiratory sensitisation is a key hazard (H334 – may cause allergy or asthma symptoms if inhaled). STOT SE 3 (H335 – respiratory irritation). Confirm LC ₅₀ from supplier data if required.
Skin Irritation	Causes skin irritation (H315 – Skin Irrit. 2). Prolonged or repeated skin contact may cause sensitisation (H317).
Eye Irritation	Causes serious eye damage (H318 – Eye Dam. 1). Molten product contact is particularly hazardous.
Sensitisation	Respiratory sensitizer (Resp. Sens. 1 – H334): may cause occupational asthma on repeated inhalation exposure. Skin sensitizer (Skin Sens. 1 – H317): may cause allergic contact dermatitis.
Carcinogenicity	Not classified as a carcinogen by IARC, NTP or OSHA. No carcinogenicity classification in Section 2.
Mutagenicity	Not classified for germ cell mutagenicity. Endpoint-specific data: see supplier toxicological data sheet or ECHA REACH dossier.

SECTION 12 ECOLOGICAL INFORMATION

Aquatic Toxicity	No acute or chronic aquatic environmental classification identified from reviewed data. Phthalic anhydride hydrolyses rapidly in water to phthalic acid; aquatic toxicity data relate primarily to phthalic acid. Avoid release to watercourses.
Persistence / Degradability	Phthalic acid (hydrolysis product) is considered readily biodegradable under aerobic conditions. Confirm biodegradation data from supplier or ECHA REACH dossier.
Bioaccumulation	Low bioaccumulation potential based on log Pow ≈1.6 (below 3.0 threshold). Confirm with supplier BCF data where available.
Mobility in Soil	Solid at ambient temperature; low vapour pressure limits atmospheric mobility. Hydrolysis in moist soil. Assess adsorption



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

	potential from supplier data.
Other Adverse Effects	Avoid uncontrolled release to the environment. Manage releases and waste under applicable local environmental regulations.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste from Product	Dispose of contents through an authorised waste contractor in accordance with local, state and national regulations. Do not pour down drains or into watercourses.
Contaminated Packaging	Empty containers may retain residues and should be handled as hazardous waste until professionally cleaned or disposed. Return or recycle packaging where schemes are available.
Indian Regulations	Follow the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and applicable State Pollution Control Board requirements. Assign waste code per actual process and local authority guidance.

SECTION 14 TRANSPORT INFORMATION

PARAMETER	UN / ADR (ROAD)	IMDG (SEA)	IATA (AIR)
UN Number	UN 2214	UN 2214	UN 2214
Proper Shipping Name	PHTHALIC ANHYDRIDE	PHTHALIC ANHYDRIDE	PHTHALIC ANHYDRIDE
Class	8	8	8
Packing Group	III	III	III
Marine Pollutant	No	No	N/A
Tunnel Restriction (ADR)	E	—	—
EmS (IMDG)	—	F-A, S-B	—

Class 8 corrosive solid. Molten form may attract different requirements — verify with carrier. Use UN-certified packaging. Drum must be labelled with Class 8 placard, UN 2214, PG III and product name. Verify current ADR, IMDG and IATA DGR rules before each shipment. Note: source listed PG as III under Marine Pollutant row — corrected to proper tabular position.

SECTION 15 REGULATORY INFORMATION

EU / REACH / CLP	Classified and labelled according to EU CLP Regulation (EC) No 1272/2008 consistent with the GHS classification in Section 2. Observe REACH registration, restriction and authorisation requirements (Regulation (EC) No 1907/2006) where applicable.
------------------	---



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

OSHA (USA)	Prepared in OSHA HCS / HazCom 2012 aligned 16-section SDS format. Verify TSCA inventory / SNUR status before US import or distribution.
India	Observe applicable MSIHC Rules 1989 (as amended), Factories Act, Environment Protection Act, Hazardous Waste Rules 2016, and applicable State Pollution Control Board requirements.
Other Jurisdictions	Canada WHMIS 2015 / HPR: classify and label using Section 2 classification; Canadian sale may require bilingual SDS / label and ingredient disclosure. China: use applicable GB/T SDS and classification requirements. Australia AICS: check inventory status before import. Middle East / GCC: observe applicable GHS-aligned local requirements. Final market placement requires confirmation of local OELs, transport class, waste code and restrictions.

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 with all applicable laws and regulations. Supreme Petro Chemicals shall not be liable for any loss, injury or damage resulting from reliance on this information.

FULL TEXT OF H-STATEMENTS

- H302 — Harmful if swallowed
- H315 — Causes skin irritation
- H317 — May cause an allergic skin reaction
- H318 — Causes serious eye damage
- H334 — May cause allergy or asthma symptoms if inhaled
- H335 — May cause respiratory irritation