



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)

Styrene Monomer *SDS*

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

CAS **100-42-5** EC **202-851-5** SIGNAL WORD **DANGER**

GHS02

Flammable Liquid

GHS07

Harmful / Irritant

GHS08

Health Hazard

GHS09

Environmental
Hazard

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

Product Name	Styrene Monomer
Product Type	Styrene — solvent / industrial chemical
Chemical Family	Styrene (vinyl benzene)
CAS No.	100-42-5
EC No.	202-851-5
Intended Use	Industrial / professional use as described on the SPC product page.
Restrictions on Use	Industrial / professional use only. Confirm suitability for final application before 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/styrene-monomer
SDS Revision	July 2026
SDS Version	3.1

SECTION 2 HAZARD IDENTIFICATION

Flam. Liq. 3; Asp. Tox. 1; Skin Irrit. 2; Eye Irrit. 2; Acute Tox. 4 (inhal.); STOT SE 3; Repr. 2; STOT RE 1; Aquatic Chronic 3



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

Signal Word

DANGER

GHS Pictograms

GHS02 (Flammable Liquid) | GHS07 (Harmful / Irritant) | GHS08
(Health Hazard) | GHS09 (Environmental Hazard)

HAZARD STATEMENTS

- H226 — Flammable liquid and vapour
- H304 — May be fatal if swallowed and enters airways
- H315 — Causes skin irritation
- H319 — Causes serious eye irritation
- H332 — Harmful if inhaled
- H335 — May cause respiratory irritation
- H361 — Suspected of damaging fertility or the unborn child
- H372 — Causes damage to organs through prolonged or repeated exposure
- H412 — Harmful to aquatic life with long lasting effects

PRECAUTIONARY — PREVENTION

- P233 — Keep container tightly closed.
- P240 — Ground/bond container and receiving equipment.
- P241 — Use explosion-proof electrical/ventilating/lighting equipment.
- P242 — Use only non-sparking tools.
- P243 — Take precautionary measures against static discharge.
- P260 — Do not breathe vapours or spray.
- 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.



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

- P305+P351+P338 — IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P331 — Do NOT induce vomiting.
- P312 — Call a POISON CENTER or doctor if you feel unwell.
- P403+P235 — Store in a well-ventilated place. Keep cool.
- 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
Styrene Monomer	100-42-202-5	851-5	≥ 99 (100)	Flam. Liq. 3; Asp. Tox. 1; Skin Irrit. 2; Eye Irrit. 2; Acute Tox. 4 (inhal.); STOT SE 3; Repr. 2; STOT RE 1; Aquatic Chronic 3

Full text of H-statements listed in Section 16. Contains inhibitor (typically 4-tert-butylcatechol, 10–15 ppm) to prevent polymerisation; concentration may vary by grade — confirm with supplier COA.

SECTION 4 FIRST AID MEASURES

Inhalation	Remove person to fresh air immediately. Keep at rest in a position comfortable for breathing. If breathing is difficult, administer oxygen. Seek medical attention if symptoms persist.
Skin Contact	Remove contaminated clothing immediately. Wash affected skin thoroughly with soap and water for at least 15 minutes. Seek medical attention if irritation persists.
Eye Contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention immediately.
Ingestion	Rinse mouth with water. Do NOT induce vomiting — aspiration hazard (H304). Immediately call a POISON CENTER or doctor. Do not give anything by mouth to an unconscious person.
Note to Physician	Aspiration hazard: H304 classified. If ingested and vomiting occurs, risk of aspiration pneumonia. Treat symptomatically. Consider gastric lavage only under intubation.



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 5 FIREFIGHTING MEASURES

Suitable Extinguishing Media	Dry chemical powder, carbon dioxide (CO ₂), alcohol-resistant foam, water spray/mist.
Unsuitable Media	Direct high-pressure water jet — may spread burning liquid.
Specific Hazards	Flammable liquid and vapour (H226). Vapours may form explosive mixtures with air; may travel to distant ignition sources and flash back. Thermal decomposition produces carbon monoxide, carbon dioxide, and irritating/toxic organic fumes. Containers may rupture or explode when heated.
Protective Equipment	Wear full protective clothing and self-contained breathing apparatus (SCBA). Use grounded/explosion-proof equipment.
Special Procedures	Evacuate non-essential personnel. Cool containers exposed to fire with water spray. Prevent contaminated firefighting water/run-off from entering drains and waterways.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions	Evacuate and isolate area. Eliminate all ignition sources (no flames, sparks, smoking). Use explosion-proof equipment. Wear appropriate PPE as specified in Section 8.
Environmental Precautions	Prevent entry into drains, sewers, soil and watercourses. Inform relevant authorities if significant spill reaches drains or water.
Containment / Clean-up	Contain and collect liquid with non-combustible absorbent material (sand, earth, vermiculite). Transfer to labelled, sealed compatible containers for disposal via an approved waste contractor. Ventilate area after clean-up.
Reference to Sections	See Section 8 for PPE, Section 13 for disposal, Section 15 for regulatory information.

SECTION 7 HANDLING AND STORAGE

Handling Precautions	Use in a well-ventilated area or with local exhaust ventilation. Avoid breathing vapours. Keep away from all ignition sources — no smoking, no open flames, no sparks. Ground and bond containers when transferring. Use only non-sparking tools and explosion-proof equipment.
-----------------------------	---



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

Hygiene	Wash hands thoroughly after handling. Remove contaminated clothing before reuse. Do not eat, drink or smoke when using this product.
Storage Conditions	Store in original, tightly closed compatible containers in a cool, dry, well-ventilated area away from direct sunlight and heat sources. Inhibitor must be maintained at adequate levels to prevent polymerisation — confirm with supplier. Inspect containers regularly for leakage or damage.
Storage Temperature	Ambient (typically $\leq 25^{\circ}\text{C}$); avoid prolonged exposure above 30°C . Monitor inhibitor level if stored long-term.
Incompatible Materials	Strong oxidising agents (nitric acid, peroxides, permanganates, chlorine). Concentrated acids, halogens. Lewis acids (e.g. aluminium chloride) at elevated temperature may cause polymerisation.
Segregation	Segregate from food, drink, animal feed, oxidisers and incompatible chemicals. Store locked up (P405).

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limit	Styrene (CAS 100-42-5): OSHA PEL 100 ppm TWA (ceiling 200 ppm); NIOSH REL 50 ppm TWA, 100 ppm STEL (15 min); ACGIH TLV 20 ppm TWA (A4 — not classifiable as human carcinogen). EU/India OELs: confirm current regional limits. Apply ALARA / good industrial hygiene where limits are not established.
Engineering Controls	Use closed handling systems or local exhaust ventilation (LEV) to control vapour. Use explosion-proof ventilation. Ensure adequate general ventilation in storage and handling areas.
Respiratory Protection	Where ventilation is inadequate: use a NIOSH/EN 14387-approved organic-vapour respirator cartridge. Use SCBA (EN 137 / NIOSH) for high-concentration or emergency situations.
Hand / Eye / Skin	Gloves: chemical-resistant nitrile, butyl rubber, neoprene, or laminate; verify breakthrough time for the specific task. Eyes/Face: chemical splash goggles (EN 166 / ANSI Z87.1); add face shield for splash risk. Body: chemical-resistant apron/coverall and safety footwear; antistatic PPE where flammable vapours may be present. Provide emergency eyewash and safety shower.



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 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colourless, oily liquid
Odour	Characteristic sweet, balsamic, almost floral odour; extremely penetrating
Odour Threshold	~0.05–0.1 ppm (literature range; confirm from supplier)
pH	Not applicable (non-aqueous)
Melting / Freezing Point	–30 to –28°C (–24 to –23°F) [NTP, 1992] — CORRECTED from source (was on 'Boiling Point' line)
Boiling Point / Range	145–147°C (293–295°F) at 760 mmHg [NTP, 1992] — CORRECTED from source (was on 'Flash Point' line)
Flash Point	~31–34°C (88°F / 34°C) closed cup [NTP, 1992; ERG] — CORRECTED from source (was on 'Auto-ignition Temperature' line)
Auto-ignition Temperature	~490°C (914°F) [USCG, 1999] — CORRECTED from source (was on 'Vapour Pressure' line)
Flammability Limits	LEL 0.9% v/v; UEL 6.8% v/v (in air)
Vapour Pressure	6.4 mmHg at 20°C; ~4.3 mmHg at 15°C; ~9.5 mmHg at 30°C [NTP, 1992] — CORRECTED from source (values were on 'Relative Density' line)
Vapour Density (air = 1)	3.6 — CORRECTED from source (value was on 'Solubility in Water' line)
Relative Density	0.906 g/cm ³ at 20°C (68°F) [USCG, 1999] — CORRECTED from source (value was on 'Log Pow' line)
Solubility in Water	Slightly soluble: < 1 mg/mL at 20°C (18°C) — CORRECTED from source (value was on 'Evaporation Rate' line)
Log Pow (Partition Coeff.)	2.95–3.0 — CORRECTED from source (value was on 'Viscosity' line)
Evaporation Rate	< 1 (n-BuOAc = 1); slower than butyl acetate
Viscosity	0.696 cP at 25°C — CORRECTED from source (value was on 'VOC Content' line)
VOC Content	~100% v/v (neat); assess per applicable regional VOC regulations

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions when inhibitor is present. May polymerise spontaneously if inhibitor is depleted or under heat/UV light.
--------------------	--



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

Conditions to Avoid	Heat, direct sunlight, open flames, ignition sources, contamination with oxidisers or Lewis acids. Inhibitor depletion (monitor in long-term storage).
Incompatible Materials	Strong oxidising agents (nitric acid, peroxides, permanganates, chlorine). Concentrated acids and halogens. Lewis acids (e.g. aluminium chloride) at elevated temperature. Reactive with aluminium chloride (AlCl ₃) — not a concern under normal ambient blending/storage.
Hazardous Decomposition	Thermal decomposition / fire produces carbon oxides (CO, CO ₂) and irritating or toxic organic fumes.
Hazardous Reactions	Exothermic polymerisation if inhibitor is depleted or under heat/UV exposure. No other hazardous reactions under normal conditions when stored and handled correctly.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	LD ₅₀ (rat, oral) ~5,000 mg/kg (literature). GHS Asp. Tox. 1 (H304) — do not induce vomiting; aspiration into lungs may be fatal.
Acute Dermal Toxicity	LD ₅₀ data not established in reviewed sources. Classified Skin Irrit. 2 (H315) — causes skin irritation.
Acute Inhalation Toxicity	LC ₅₀ (rat, 4h) ~11.8 mg/L (literature). Classified Acute Tox. 4, inhalation (H332) — harmful if inhaled; STOT SE 3 (H335) — may cause respiratory irritation.
Skin Irritation	Classified Skin Irrit. 2 (H315). Causes skin irritation on prolonged or repeated contact. Defatting of skin with repeated exposure.
Eye Irritation	Classified Eye Irrit. 2 (H319). Causes serious eye irritation.
Sensitisation	Not classified as a skin or respiratory sensitiser under GHS. No evidence of sensitisation at current classification.
Carcinogenicity	IARC Group 2B (possibly carcinogenic to humans). ACGIH A4 (not classifiable as human carcinogen). NTP: reasonably anticipated. GHS not classified for carcinogenicity under Carc. categories; refer to occupational exposure guidelines.
Mutagenicity	Not classified for germ cell mutagenicity under GHS. Some in-vitro mutagenicity data exist; not considered significant at current classification level.
Reproductive Toxicity	Classified Repr. 2 (H361) — suspected of damaging fertility or the unborn child.
STOT Single Exposure	Classified STOT SE 3 (H335) — may cause respiratory irritation.



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

STOT Repeated Exposure	Classified STOT RE 1 (H372) — causes damage to organs through prolonged or repeated exposure (nervous system / hearing). Use exposure controls and medical surveillance.
Aspiration Hazard	Classified Asp. Tox. 1 (H304) — may be fatal if swallowed and enters airways. Do not induce vomiting after ingestion.

SECTION 12 ECOLOGICAL INFORMATION

Aquatic Toxicity	Classified Aquatic Chronic 3 (H412). LC ₅₀ (fish, 96h) ~4 mg/L (Pimephales promelas, literature). EC ₅₀ (Daphnia, 48h) ~4 mg/L. Harmful to aquatic organisms with long lasting effects.
Persistence / Degradability	Styrene is readily biodegradable under aerobic conditions (BOD studies confirm >60% in 28 days). May persist under anaerobic conditions. Do not assume biodegradability in all environments without site-specific verification.
Bioaccumulation	Log Kow 2.95–3.0; BCF estimated low to moderate. Not expected to significantly bioaccumulate in aquatic organisms at this log Kow value.
Mobility in Soil	Moderately mobile in soil; low adsorption to organic matter given low Koc. May leach to groundwater. Prevent release to soil.
Other Adverse Effects	Avoid uncontrolled release to the environment. Manage under applicable environmental regulations.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste from Product	Dispose of contents through an authorised hazardous waste contractor in accordance with national and local regulations. Do not pour down drains or into the environment.
Contaminated Packaging	Empty containers may retain flammable vapours and residues; handle as hazardous until thoroughly cleaned or disposed of through an approved contractor.
Indian Regulations	Follow Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (amended 2019) and applicable SPCB / CPCB requirements. Assign waste category under Schedule I/II as appropriate.



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 14 TRANSPORT INFORMATION

PARAMETER	UN / ADR (ROAD)	IMDG (SEA)	IATA (AIR)
UN Number	UN 2055	UN 2055	UN 2055
Proper Shipping Name	STYRENE MONOMER, STABILIZED	STYRENE MONOMER, STABILIZED	Styrene monomer, stabilized
Class	3	3	3
Packing Group	III	III	III
Marine Pollutant	No	No	—

UN-certified drum required for international transport. Label with Class 3 placard, UN 2055, PG III and product name. Verify current ADR/IMDG/IATA regulations with carrier before shipment. Packing Group corrected to III (source had inconsistent 'II' in one field — styrene UN 2055 is PG III per IMDG 2024 and IATA DGR).

SECTION 15 REGULATORY INFORMATION

EU / REACH / CLP	Registered under REACH (EC 1907/2006) where applicable. Classified and labelled per CLP Regulation (EC 1272/2008) and UN GHS Rev.11. Observe applicable workplace, VOC and environmental requirements.
OSHA (USA)	Prepared in OSHA HCS/HazCom aligned 16-section SDS format. Styrene is listed as a hazardous chemical under OSHA 29 CFR 1910.1000 (Table Z-2).
India	Observe applicable Indian MSIHC Rules 1989, Factories Act, Hazardous Waste Rules 2016, Water/Air (Prevention of Pollution) Acts, and CPCB/SPCB requirements for storage, transport and disposal.
Canada WHMIS / HPR	Classify and label under WHMIS 2015/HPR using Section 2 classification. Canadian supply may require bilingual SDS/label and ingredient disclosure.
TSCA (USA)	Styrene (CAS 100-42-5) is listed on the TSCA inventory. Verify SNUR or any TSCA Section 6 restrictions before US import or distribution.
Australia (AICS)	Check AICS inventory status before export or import.
Middle East / GCC	Observe applicable GHS-aligned local requirements.
Other Jurisdictions	Final market placement requires confirmation of local inventory status, OELs, transport class, waste codes and restrictions.



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 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 Rev 1.0 dated May 2026)
Key Sources	SPC product page; UN GHS Rev.11 Annex 4; OSHA HCS Appendix D; EU REACH Annex II/CLP; Canada WHMIS/HPR; PubChem CID 7501 (Styrene); ECHA CHEM; NIOSH/OSHA; CAMEO; NTP 1992; USCG 1999; DOT ERG. Accessed June 2026.
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.

FULL TEXT OF H-STATEMENTS

- H226 — Flammable liquid and vapour
- H304 — May be fatal if swallowed and enters airways
- H315 — Causes skin irritation
- H319 — Causes serious eye irritation
- H332 — Harmful if inhaled
- H335 — May cause respiratory irritation
- H361 — Suspected of damaging fertility or the unborn child
- H372 — Causes damage to organs through prolonged or repeated exposure
- H412 — Harmful to aquatic life with long lasting effects