



SUPREME PETRO
CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
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SAFETY DATA SHEET (SDS)

Mono Ethanol Amine (MEA)
SDS

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

CAS 141-43-5 EC 205-483-3 SIGNAL WORD DANGER

GHS02 Flammable	GHS05 Corrosive	GHS07 Harmful / Irritant	GHS09 Environmental Hazard
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SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE
COMPANY

Product Name	Mono Ethanol Amine (MEA)
Product Type	Ethanolamine — corrosive / irritant chemical
Chemical Family	Ethanolamine
CAS No.	141-43-5
EC No.	205-483-3
Intended Use	Industrial chemical intermediate; used in gas treatment, detergents, cosmetics, corrosion inhibitors, cement additives, and chemical synthesis.
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/mono-ethanol-amine-mea
SDS Revision	July 2026
SDS Version	3.1



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SECTION 2 HAZARD IDENTIFICATION

Flam. Liq. 4; Acute Tox. 4 (oral, dermal, inhalation); Skin Corr. 1; Skin Sens. 1; Eye Dam. 1; STOT SE 3; Aquatic Chronic 3

Signal Word	DANGER
GHS Pictograms	GHS02 (Flammable) GHS05 (Corrosive) GHS07 (Harmful / Irritant) GHS09 (Environmental Hazard)

HAZARD STATEMENTS

- H302 — Harmful if swallowed
- H312 — Harmful in contact with skin
- H314 — Causes severe skin burns and eye damage
- H317 — May cause an allergic skin reaction
- H318 — Causes serious eye damage
- H332 — Harmful if inhaled
- H335 — May cause respiratory irritation
- 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



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- 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.
- 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
Mono Ethanol Amine (MEA)	141-43-5	205-483-3	100	Flam. Liq. 4; Acute Tox. 4 (oral, dermal, inhalation); Skin Corr. 1; Skin Sens. 1; Eye Dam. 1; STOT SE 3; Aquatic Chronic 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 breathing is difficult, give oxygen. Seek medical attention if symptoms persist or worsen.
Skin Contact	Remove contaminated clothing immediately. Wash affected skin thoroughly with soap and plenty of water for at least 15 minutes. Seek medical attention if irritation, burns, 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.
Ingestion	Rinse mouth. Do not induce vomiting. If conscious, give water to drink. Immediately call a POISON CENTER or doctor.



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Note to Physician

Treat symptomatically based on exposure route and product hazards. MEA is corrosive; burns to skin, eyes and mucous membranes should be assessed clinically.

SECTION 5 FIREFIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, CO₂, foam, or water spray. Water fog may be used to cool containers and disperse vapours.

Unsuitable Media

Do not use direct high-pressure water jet — may spread the material.

Specific Hazards

MEA is combustible (flash point ~85 °C). In fire, produces toxic and irritating fumes including nitrogen oxides, carbon oxides, and ammonia. Containers may rupture when heated.

Protective Equipment

Wear full protective clothing and self-contained breathing apparatus (SCBA). Do not enter the fire zone without appropriate respiratory and body protection.

Special Procedures

Evacuate non-essential personnel. Prevent contaminated fire-fighting run-off from entering drains and waterways. Cool closed containers exposed to fire with water spray.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions

Isolate the area. Remove ignition sources. Use full PPE as specified in Section 8. Avoid breathing vapours. Keep upwind of spill.

Environmental Precautions

Prevent entry into drains, sewers, soil and watercourses. If release enters waterways or public sewers, notify relevant authorities.

Containment / Clean-up

Absorb with inert material (sand, vermiculite, dry earth). Collect in labelled, compatible containers for disposal. Do not use combustible absorbents. Flush residual 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

Use adequate local exhaust ventilation. Avoid contact with skin, eyes, and clothing. Avoid breathing vapours. Ground and bond containers



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	when transferring. Use explosion-proof equipment. Keep away from ignition sources.
Hygiene	Wash hands thoroughly after handling. Remove and wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.
Storage Conditions	Store in original, tightly closed compatible containers (steel or high-density polyethylene). Inspect containers regularly for leakage or damage.
Storage Temperature	Ambient temperature; keep cool and away from heat sources. MEA solidifies below ~10 °C — ensure trace heating is available in cold climates.
Incompatible Materials	Strong oxidising agents (nitric acid, permanganates, peroxides, chlorine), concentrated mineral acids, and halogens. Reactive with aluminium chloride under elevated temperature.
Segregation	Segregate from food, drink, animal feed, strong acids, and incompatible chemicals.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limit	MEA (CAS 141-43-5): OSHA PEL 3 ppm (8h TWA); ACGIH TLV 3 ppm TWA / 6 ppm STEL; NIOSH REL 3 ppm / 8 mg/m ³ (10h TWA). India: verify current CPCB / factory inspectorate OEL. Confirm local applicable limit with regional authority.
Engineering Controls	Use closed handling systems or local exhaust ventilation (LEV) to control vapour and aerosol. Provide explosion-proof ventilation where flammable vapours may accumulate. Provide eyewash station and safety shower in the work area.
Respiratory Protection	If ventilation is inadequate, use a NIOSH/EN approved respirator with organic vapour / ammonia cartridge. Use SCBA for emergency response or confined-space entry.
Hand / Eye / Skin	Hands: chemical-resistant gloves (nitrile, butyl rubber, or neoprene; select breakthrough time appropriate to task duration). Eyes/Face: EN 166 / ANSI Z87.1 chemical splash goggles; face shield where splash risk exists. Body: chemical-resistant apron or coverall; safety footwear; antistatic PPE where flammable vapours may be present.



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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colourless to pale yellow, viscous, hygroscopic liquid (or solid below ~10 °C)
Odour	Characteristic ammonia-like odour
Odour Threshold	Not established in reviewed public sources
pH	~12.1 (neat, 25 °C); strongly alkaline
Melting / Freezing Point	~10.3 °C (50.5 °F) — source value confirmed (NTP, 1992)
Boiling Point / Range	~170 °C (338 °F) at 760 mmHg — source value confirmed (NTP, 1992)
Flash Point	~85 °C (185 °F) — closed cup (see flag)
Auto-ignition Temperature	~410 °C (770 °F) — source value confirmed (NTP, 1992)
Flammability Limits	Lower (LEL): ~5 % v/v; Upper (UEL): ~17 % v/v (verify from supplier SDS)
Vapour Pressure	0.4 mmHg at 20 °C (68 °F); 6 mmHg at 60 °C (140 °F) — source values confirmed (NTP, 1992)
Vapour Density (air = 1)	2.1 — heavier than air; will sink (NTP, 1992)
Relative Density	1.016 at 20 °C (68 °F) — denser than water (USCG, 1999)
Solubility in Water	Miscible in all proportions (≥ 100 mg/mL at 68 °F, NTP, 1992)
Log Pow (Partition Coeff.)	-1.31 (estimated, peer-reviewed)
Evaporation Rate	See supplier SDS for grade-specific value
Viscosity	18.95 cP at 25 °C; 5.03 cP at 60 °C (peer-reviewed)
VOC Content	Assess per applicable regional VOC regulations

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage and handling conditions.
Conditions to Avoid	Avoid heat, open flames, ignition sources, contamination, and exposure to incompatible materials.
Incompatible Materials	Strong oxidising agents (nitric acid, chlorine, permanganates, peroxides). Concentrated mineral acids. Halogens. Reactive with aluminium chloride (AlCl ₃) under elevated temperature — not a concern in ambient storage or blending.
Hazardous Decomposition	In fire: carbon oxides, nitrogen oxides, and irritating or toxic fumes may be formed.
Hazardous Reactions	Will not occur under normal conditions when stored and handled correctly.



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SECTION 11 TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	Classified Acute Tox. 4 (H302 — Harmful if swallowed). LD ₅₀ oral rat: ~1720 mg/kg (literature; verify from supplier test data).
Acute Dermal Toxicity	Classified Acute Tox. 4 (H312 — Harmful in contact with skin). Numeric LD ₅₀ requires supplier/test confirmation.
Acute Inhalation Toxicity	Classified Acute Tox. 4 (H332 — Harmful if inhaled). Numeric LC ₅₀ requires supplier/test confirmation.
Skin Irritation	Classified Skin Corr. 1 (H314 — Causes severe skin burns); Skin Sens. 1 (H317 — May cause an allergic skin reaction). MEA is strongly alkaline and corrosive on prolonged/repeated contact.
Eye Irritation	Classified Eye Dam. 1 (H318 — Causes serious eye damage). Risk of irreversible ocular injury on direct contact.
Sensitisation	Classified Skin Sens. 1 (H317). Allergic skin reactions have been reported in occupationally exposed workers.
Carcinogenicity	Not classified as carcinogenic under GHS. No listing in IARC Group 1/2A/2B or NTP for MEA. Confirm from supplier SDS.
Mutagenicity	Not classified. In vitro genotoxicity data reported as negative in available peer-reviewed literature; confirm from supplier SDS.

SECTION 12 ECOLOGICAL INFORMATION

Aquatic Toxicity	Classified Aquatic Chronic 3 (H412 — Harmful to aquatic life with long lasting effects). Acute LC ₅₀ fish (96h) and EC ₅₀ values reported in literature; obtain from ECHA or supplier SDS for quantitative data.
Persistence / Degradability	MEA is reported to be readily biodegradable under aerobic conditions. Confirm from supplier/ECHA data before claiming ready biodegradability in regulatory submissions.
Bioaccumulation	Low bioaccumulation potential (log Kow = -1.31); BCF < 100. Not expected to bioaccumulate significantly.
Mobility in Soil	High water solubility and low log Kow indicate significant mobility in soil; risk of groundwater contamination on release. Prevent uncontrolled soil discharge.
Other Adverse Effects	Avoid uncontrolled release to the environment. Manage all 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 hazardous waste contractor in accordance with local, state, and national regulations. Do not pour down drains or into watercourses.
Contaminated Packaging	Empty containers may retain hazardous residues. Handle as hazardous until thoroughly cleaned or disposed of via an approved waste contractor.
Indian Regulations	Follow Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and applicable State Pollution Control Board requirements. Assign waste code in accordance with actual process and local regulation.

SECTION 14 TRANSPORT INFORMATION

PARAMETER	UN / ADR (ROAD)	IMDG (SEA)	IATA (AIR)
UN Number	UN 2491	UN 2491	UN 2491
Proper Shipping Name	ETHANOLAMINE	ETHANOLAMINE	Ethanolamine
Class	8	8	8
Packing Group	III	III	III
Marine Pollutant	No	No	N/A

UN 2491, Ethanolamine, Class 8, Packing Group III. UN-certified packaging required for international transport. Verify current carrier tariffs, EmS codes (IMDG), and special provisions (ADR) before each shipment. Label with Class 8 (Corrosive) placard, UN number, PG III, and product name.

SECTION 15 REGULATORY INFORMATION

EU / REACH / CLP	Subject to REACH (EC 1907/2006) registration obligations. Classified and labelled according to GHS/CLP (EC 1272/2008) as listed in Section 2. Observe applicable workplace chemical, VOC, and environmental directives.
OSHA (USA)	Prepared in 16-section SDS format aligned with OSHA HCS/HazCom 2012 (29 CFR 1910.1200). Verify TSCA (15 U.S.C. §2601) inventory/SNUR status before US import or distribution.
India	Observe applicable MSIHC Rules 1989, Factories Act 1948, Hazardous and Other Wastes Rules 2016, Environment Protection Act 1986, and



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State Pollution Control Board requirements. Verify current OEL under applicable state/central factory rules.

Other Jurisdictions

Canada: classify/label under WHMIS 2015/HPR; bilingual SDS and ingredient disclosure may be required. China: observe GB/T SDS and classification requirements. GCC/Middle East: observe applicable GHS-aligned local requirements. Australia: check AICS inventory status before export or import.

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

- H302 — Harmful if swallowed
- H312 — Harmful in contact with skin
- H314 — Causes severe skin burns and eye damage
- H317 — May cause an allergic skin reaction
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