ZEELCHEM™ 1000 — Polyacrylic Acid

Polyacrylic Acid (PAA)

Safety Data Sheet · GHS Rev.10 · MSIHC Sch. 9 · REACH Annex II · Revision 00 · Date of issue 19-10-2026

ISO 9001:2015 • ISO 22000:2018 • ISO 14001:2015 CERTIFIED MANUFACTURER • MADE IN INDIA

Signal word: WARNING

GHS classification: Skin Irritation, Category 2 (H315); Serious Eye Irritation, Category 2A (H319)

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

Product identifier	ZEELCHEM™ 1000 Polyacrylic Acid
Chemical name	Polyacrylic Acid (PAA)
CAS No.	9003-01-4
Recommended use	Scale inhibitor / dispersant / chelating agent for industrial water treatment and process applications
Uses advised against	Uses other than those recommended; not for direct food or drinking-water addition unless approved by the user's competent authority.
Manufacturer / supplier	ZEEL PRODUCT, A-23, Reva Duplex, Behind Bharat Petrol Pump, Ankhol, New Waghodia Road, Vadodara – 390019, Gujarat, India
Telephone / e-mail	+91-9724593964 · zeelproduct@gmail.com
Emergency telephone	+91-9724593964 (office hours, IST). India emergency: 112. National Poisons Information Centre (AIIMS, New Delhi): 1800-116-117.

SECTION 2 HAZARD(S) IDENTIFICATION

GHS classification	Skin Irritation, Category 2 (H315); Serious Eye Irritation, Category 2A (H319)
Signal word	Warning
Hazard statements	H315: Causes skin irritation. H319: Causes serious eye irritation.

Signal word: WARNING

Precautionary statements:

- P264: Wash hands and exposed skin thoroughly after handling.
- P280: Wear protective gloves, protective clothing and eye protection.
- P302+P352: IF ON SKIN: Wash with plenty of water.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- P332+P313: If skin irritation occurs: Get medical advice/attention.
- P337+P313: If eye irritation persists: Get medical advice/attention.

Other hazards: None known. Not a PBT/vPvB substance.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	EC No.	Conc. (% w/w)
Polyacrylic acid	9003-01-4	Polymer – not applicable	≥ 48.0
Acrylic acid (residual monomer)	79-10-7	201-177-9	≤ 0.5
Water	7732-18-5	231-791-2	Balance

SECTION 4 FIRST-AID MEASURES

Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms persist.
Skin contact	Wash with plenty of water. Remove contaminated clothing. Get medical advice if irritation develops.
Eye contact	Rinse immediately with plenty of water for at least 15 minutes, holding eyelids apart. Remove contact lenses if easy to do. Get medical advice if irritation persists.
Ingestion	Rinse mouth with water. Do NOT induce vomiting. Give 1–2 glasses of water to drink if conscious. Get medical advice.
Most important symptoms	Irritation and redness of eyes and skin.
Notes to physician	Treat symptomatically.

SECTION 5 FIRE-FIGHTING MEASURES

Suitable extinguishing media	Water spray, alcohol-resistant foam, dry chemical, carbon dioxide; use media suitable for surrounding fire.
Unsuitable media	None known.
Specific hazards	Aqueous solution – non-combustible. On drying and in a fire, may decompose to carbon monoxide, carbon dioxide.
Protective equipment	Self-contained breathing apparatus and full protective clothing. Cool containers with water spray.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear protective equipment (Section 8). Keep unprotected persons away. Avoid contact with skin and eyes.
Environmental precautions	Prevent entry into drains, surface water and soil. Inform authorities if large spills enter water courses.

Containment and clean-up	Contain with inert absorbent (sand, earth, vermiculite). Neutralise residues with sodium carbonate or lime. Collect in suitable labelled containers for disposal. Flush area with water.

SECTION 7 HANDLING AND STORAGE

Safe handling	Avoid contact with eyes, skin and clothing. Do not eat, drink or smoke at work. Provide eyewash and safety shower near the work area. When diluting, add product to water, not water to product.
Storage conditions	Store in closed HDPE containers in a cool, shaded, ventilated area between 5 °C and 40 °C. Avoid freezing and direct sunlight; mix gently before use if slight stratification is seen. Shelf life: 12 months in unopened packing.
Suitable materials	HDPE, polypropylene, FRP, stainless steel 316.
Incompatible materials	Strong bases (exothermic neutralisation), strong oxidising agents, reactive metals.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits	No exposure limits established for this product under the Factories Act 1948 (Second Schedule), ACGIH TLV, OSHA PEL or EU IOELV.
Engineering controls	Good general ventilation; local exhaust where mists are generated.
Eye / face protection	Chemical safety goggles (EN 166 / ANSI Z87.1 / IS 5983).
Hand protection	Chemical-resistant gloves – nitrile, neoprene or PVC (EN ISO 374).
Body protection	Chemical-resistant apron or suit and safety footwear.
Respiratory protection	Not normally required. If mists are formed, use a respirator with combined particle/acid-gas filter (EN 14387 type E-P2 or NIOSH approved).

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state / appearance	Colourless to light-amber, transparent viscous liquid
Odour	Odourless to faint characteristic odour
pH	2.0 – 3.0
Density / relative density	≥ 1.20 g/cm³
Melting / freezing point	Approx. 0 °C (aqueous solution)
Initial boiling point	> 100 °C (water evaporates)
Flash point	Not applicable – aqueous, non-flammable
Flammability	Non-flammable
Solubility in water	Completely miscible

Partition coefficient (log Kow)	< 0 (estimated)
Auto-ignition temperature	Not applicable
Explosive / oxidising properties	Not explosive; not oxidising
Active / solid content	≥ 48.0 %

SECTION 10 STABILITY AND REACTIVITY

Reactivity	Reacts with strong bases (exothermic).
Chemical stability	Stable under recommended storage and handling conditions.
Possible hazardous reactions	None under normal conditions.
Conditions to avoid	Freezing, prolonged direct sunlight, temperatures above 50 °C.
Incompatible materials	Strong bases (exothermic neutralisation), strong oxidising agents, reactive metals.
Hazardous decomposition products	Carbon monoxide, carbon dioxide (in fire or on heating to dryness).

SECTION 11 TOXICOLOGICAL INFORMATION

Acute oral toxicity	Not classified. Based on available data for the polymer, classification criteria are not met (LD50 oral, rat > 2,000 mg/kg bw expected).
Skin corrosion / irritation	Causes skin irritation (acidic aqueous solution).
Serious eye damage / irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified. Not listed by IARC, NTP or OSHA.
Reproductive toxicity	Not classified.
STOT – single / repeated exposure	Not classified.
Aspiration hazard	Not applicable.

SECTION 12 ECOLOGICAL INFORMATION

Aquatic toxicity	Low acute toxicity to fish, daphnia and algae expected for low-molecular-weight polycarboxylates (EC/LC50 > 100 mg/L expected).
Persistence and degradability	Not readily biodegradable. Eliminated in wastewater treatment plants mainly by adsorption to sludge.
Bioaccumulative potential	Not expected to bioaccumulate (polymer, high water solubility).

Mobility in soil	Water soluble; adsorbs to soil and sediment.
PBT / vPvB assessment	Not considered PBT or vPvB.

SECTION 13 DISPOSAL CONSIDERATIONS

Product	Dispose of through an authorised facility in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (India) and local regulations. Do not discharge undiluted to drains.
Packaging	Rinse empty containers with water (use rinse water as product dilution where possible). Recycle or dispose of through an authorised recycler.

SECTION 14 TRANSPORT INFORMATION

Item	Road (ADR / India CMVR) · Sea (IMDG) · Air (IATA)
UN number	Not applicable
UN proper shipping name	Not regulated
Transport hazard class	Not regulated
Packing group	Not applicable
Environmental hazards	Not a marine pollutant
Special precautions	None. Keep containers closed and upright.

SECTION 15 REGULATORY INFORMATION

India	Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 (as amended) – SDS format per Schedule 9; Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996; Factories Act, 1948; Hazardous and Other Wastes Rules, 2016; Central Motor Vehicles Rules, 1989.
Global GHS	Classified and labelled according to the UN Globally Harmonized System (GHS), Revision 10.
European Union	Regulation (EC) No 1907/2006 (REACH), Annex II as amended by (EU) 2020/878; Regulation (EC) No 1272/2008 (CLP).
USA	OSHA Hazard Communication Standard 29 CFR 1910.1200 (HCS 2012/2024).
Chemical inventories	Users should confirm inventory status (e.g. TSCA, REACH, IECSC, AICIS, KECI, CSCL) for their country before import.

SECTION 16 OTHER INFORMATION

Document no. / revision	ZP/SDS/1000/R00
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Prepared by	Quality Assurance & Regulatory, ZEEL PRODUCT
Abbreviations	GHS – Globally Harmonized System; CAS – Chemical Abstracts Service; EC – European Community number; PBT – persistent, bioaccumulative, toxic; ADR/IMDG/IATA – road/sea/air dangerous-goods codes; TREM – transport emergency card.

This SDS was prepared in good faith on the basis of our present knowledge. It describes the product for safety purposes only and does not guarantee specific properties. The user is responsible for safe handling and for compliance with all applicable laws.

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