# ZEELCHEM™ 151 — PAPEMPA

PAPEMP — Polyamino Polyether Methylene Phosphonic Acid

**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: DANGER**

**GHS classification: Corrosive to Metals, Category 1 (H290); Skin Corrosion, Category 1B (H314); Serious Eye Damage, Category 1 (included in H314)**

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

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| **Product identifier** | ZEELCHEM™ 151 PAPEMPA |
| **Chemical name** | PAPEMP — Polyamino Polyether Methylene Phosphonic Acid |
| **CAS No.** | 130668-24-5 |
| **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

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| **GHS classification** | Corrosive to Metals, Category 1 (H290); Skin Corrosion, Category 1B (H314); Serious Eye Damage, Category 1 (included in H314) |
| **Signal word** | Danger |
| **Hazard statements** | H290: May be corrosive to metals. H314: Causes severe skin burns and eye damage. |

**Signal word: DANGER**

Precautionary statements:

- P234: Keep only in original packaging.
- P260: Do not breathe mist or spray.
- P264: Wash hands and exposed skin thoroughly after handling.
- P280: Wear protective gloves, protective clothing, eye protection and face protection.

- P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with 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.
- P310: Immediately call a POISON CENTRE or doctor.
- P390: Absorb spillage to prevent material damage.
- P405: Store locked up.
- P406: Store in a corrosion-resistant container with a resistant inner liner.
- P501: Dispose of contents/container in accordance with local, state and national regulations.

Other hazards: None known. Not a PBT/vPvB substance. Contact with metals may release flammable hydrogen gas.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

| Component | CAS No. | EC No. | Conc. (% w/w) |
|---|---|---|---|
| **Polyamino polyether methylene phosphonic acid (PAPEMP)** | 130668-24-5 | — | ≥ 40.0 |
| **Water** | 7732-18-5 | 231-791-2 | Balance |

## SECTION 4 FIRST-AID MEASURES

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| **Inhalation** | Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms persist. |
| **Skin contact** | Remove contaminated clothing immediately. Rinse skin with plenty of water for at least 15 minutes. Get medical attention immediately. |
| **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 attention immediately. |
| **Ingestion** | Rinse mouth with water. Do NOT induce vomiting. Give 1–2 glasses of water to drink if conscious. Get medical attention immediately. |
| **Most important symptoms** | Burns, pain, redness; risk of serious eye damage. |
| **Notes to physician** | Treat symptomatically. Acidic, corrosive product. |

## SECTION 5 FIRE-FIGHTING MEASURES

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| **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 oxides of phosphorus, oxides of nitrogen, carbon monoxide, carbon dioxide. Contact with metals may release hydrogen. |
| **Protective equipment** | Self-contained breathing apparatus and full protective clothing. Cool containers with water spray. |

## SECTION 6 ACCIDENTAL RELEASE MEASURES

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| **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

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| **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 original closed HDPE / stainless-steel containers in a cool, dry, well-ventilated and shaded area away from strong alkalis and oxidisers. Avoid freezing and prolonged direct sunlight. Shelf life: 12 months in unopened packing. |
| **Suitable materials** | HDPE, polypropylene, FRP, stainless steel 316. Do not use mild steel, galvanised steel, aluminium or copper. |
| **Incompatible materials** | Strong bases, strong oxidising agents, mild steel, galvanised steel, aluminium, copper and their alloys (hydrogen gas may be released). |

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

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| **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) and face shield. |
| **Hand protection** | Chemical-resistant gloves – nitrile, neoprene or PVC (EN ISO 374). |
| **Body protection** | Chemical-resistant apron or suit and safety footwear (acid-resistant). |
| **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

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| **Physical state / appearance** | Light-yellow to amber transparent liquid |
| **Odour** | Odourless to faint characteristic odour |
| **pH** | ≤ 2.0 |
| **Density / relative density** | 1.20 – 1.30 g/cm³ |

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| **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** | ≥ 40.0 % |

## SECTION 10 STABILITY AND REACTIVITY

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| **Reactivity** | Reacts with bases (exothermic) and corrodes many metals. |
| **Chemical stability** | Stable under recommended storage and handling conditions. |
| **Possible hazardous reactions** | Contact with reactive metals may release hydrogen gas. |
| **Conditions to avoid** | Freezing, prolonged direct sunlight, temperatures above 50 °C. |
| **Incompatible materials** | Strong bases, strong oxidising agents, mild steel, galvanised steel, aluminium, copper and their alloys (hydrogen gas may be released). |
| **Hazardous decomposition products** | Oxides of phosphorus, oxides of nitrogen, carbon monoxide, carbon dioxide (in fire or on heating to dryness). |

## SECTION 11 TOXICOLOGICAL INFORMATION

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| **Acute oral toxicity** | Not classified. Based on available data for the active substance, classification criteria are not met. |
| **Acute dermal toxicity** | Not classified. |
| **Skin corrosion / irritation** | Causes severe skin burns (strongly acidic, pH ≤ 2). |
| **Serious eye damage / irritation** | Causes serious eye damage. |
| **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. |

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| **Aspiration hazard** | Not applicable. |

## SECTION 12 ECOLOGICAL INFORMATION

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| **Aquatic toxicity** | Phosphonates show low to moderate toxicity to aquatic organisms; effects on algae may be caused by complexation of trace nutrients. Neutralise before release. |
| **Persistence and degradability** | Not readily biodegradable. Strongly adsorbs to sediments and sludge; slow photodegradation and degradation in presence of metal ions. |
| **Bioaccumulative potential** | Low (log Kow < 0). |
| **Mobility in soil** | Low mobility due to strong adsorption to soil minerals. |
| **PBT / vPvB assessment** | Not considered PBT or vPvB. |

## SECTION 13 DISPOSAL CONSIDERATIONS

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| **Product** | Neutralise and 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** | UN 3265 |
| **UN proper shipping name** | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (contains PAPEMP) |
| **Transport hazard class** | 8 |
| **Packing group** | III |
| **Environmental hazards** | Not a marine pollutant |
| **Special precautions** | Keep upright; segregate from alkalis. India road transport: Central Motor Vehicles Rules 1989 (Rules 129–137) – TREM card required. |

## SECTION 15 REGULATORY INFORMATION

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| **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). |

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| **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

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| **Document no. / revision** | ZP/SDS/151/R00 |
| **Date of issue** | 19-10-2026 |
| **Next review** | 18-10-2029 |
| **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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