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# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

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|---|---|---|---|
| **Product:** Polyacrylamide (PAM), Anionic | **Revision date:** 2026-10-29 | **Version:** 1.0 | **Brand:** Richest |

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

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|---|---|
| **Product name** | Polyacrylamide (PAM), Anionic |
| **Synonyms** | PAM; Poly(acrylamide); Anionic polyacrylamide; APAM |
| **CAS No.** | 9003-05-8 |
| **EC No.** | 618-350-3 |
| **Molecular formula** | (C3H5NO)n |
| **Molecular weight** | 16-18 million (relative molecular weight) |
| **Relevant identified uses** | Flocculant for water and wastewater treatment; viscosifier and fluid-loss additive for oil drilling; retention and drainage aid in papermaking. |
| **Uses advised against** | None |
| **Company** | Richest Group Ltd. |
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## SECTION 2: Hazards identification

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|---|---|
| **GHS Classification** | Not classified as hazardous according to Regulation (EC) No 1272/2008 |
| **Pictogram(s)** | None |
| **Signal word** | None |
| **Hazard statement(s)** | None |
| **Precautionary statement(s)** | None |

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| **Other hazards** | Spilled polymer solution is very slippery (slip hazard). |

## SECTION 3: Composition/information on ingredients

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| **Component** | Polyacrylamide |
| **CAS No.** | 9003-05-8 |
| **EC No.** | 618-350-3 |
| **Classification** | Not classified as hazardous |
| **Concentration (%)** | ≤100 % |

## SECTION 4: First aid measures

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| **If inhaled** | If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician if symptoms occur. |
| **In case of skin contact** | Take off contaminated clothing. Wash off with soap and plenty of water. Consult a physician if irritation occurs. |
| **In case of eye contact** | Rinse eyes with plenty of water as a precaution. Remove contact lenses if present and easy to do. Consult a physician if irritation persists. |
| **If swallowed** | Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician if feeling unwell. |
| **Most important symptoms and effects** | Dust may cause mechanical irritation of eyes and respiratory tract; spilled polymer solutions are extremely slippery. |
| **Indication of any immediate medical attention** | Treat symptomatically. |

## SECTION 5: Firefighting measures

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| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Unsuitable extinguishing media** | None known. |
| **Special hazards arising from the chemical** | Carbon oxides and nitrogen oxides (NOx) may be formed in the event of fire. |
| **Advice for firefighters** | Wear self-contained breathing apparatus for firefighting if necessary. |

## SECTION 6: Accidental release measures

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| **Personal precautions, protective equipment and emergency** | Avoid dust formation. Avoid breathing vapours, mist, gas or dust. Use personal protective equipment. Ensure adequate ventilation. Caution: spilled |

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| **procedures** | polymer solution is very slippery. |
| **Environmental precautions** | Do not let product enter drains. Avoid release to the environment. |
| **Methods and materials for containment and cleaning up** | Collect spilled polymer prior to flushing with water. Sweep up or absorb with inert material and place into a suitable, closed container for disposal. |

## SECTION 7: Handling and storage

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| **Precautions for safe handling** | Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Wash hands thoroughly after handling. |
| **Conditions for safe storage, including any incompatibilities** | Keep container tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. |

## SECTION 8: Exposure controls/personal protection

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| **Occupational exposure limit values** | No specific OEL established for the polymer; observe general dust limits (inhalable 10 mg/m3; respirable 3 mg/m3). Residual acrylamide monomer (CAS 79-06-1): ACGIH TWA 0.03 mg/m3 (skin). |
| **Biological limit values** | None established. |
| **Appropriate engineering controls** | Ensure adequate ventilation. Provide safety shower and eye wash station. |
| **Eye/face protection** | Tightly fitting safety goggles (EN 166). |
| **Skin protection** | Handle with chemical-resistant gloves. |
| **Body protection** | Wear protective work clothing. |
| **Respiratory protection** | Use suitable respirator when dusts or mists are generated. |
| **Thermal hazards** | None known. |

## SECTION 9: Physical and chemical properties

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| **Physical state** | Solid (granular powder) |
| **Colour** | Off-white or yellowish |
| **Odour** | Odourless |
| **Melting point / freezing point** | >200 °C (decomposes) |
| **Boiling point or initial boiling point and boiling range** | Not applicable (solid polymer, decomposes) |
| **Flammability** | May form combustible dust concentrations in air |

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| **Lower and upper explosion limit / flammability limit** | Not applicable (solid at ambient conditions) |
| **Flash point** | Not applicable (solid) |
| **Auto-ignition temperature** | No data available |
| **Decomposition temperature** | >200 °C |
| **pH** | 6-8 (0.5 % solution, 25 °C) |
| **Kinematic viscosity** | Not applicable (solid); aqueous solutions are highly viscous |
| **Solubility** | Soluble in water, forming viscous solutions; insoluble in most organic solvents |
| **Partition coefficient n-octanol/water** | Not applicable (high molecular weight polymer) |
| **Vapour pressure** | Not applicable (solid polymer) |
| **Density and/or relative density** | 0.75 g/cm3 (bulk density 600-800 kg/m3) |
| **Relative vapour density** | Not applicable |
| **Particle characteristics** | Granular powder |

## SECTION 10: Stability and reactivity

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| **Reactivity** | Non-reactive under normal ambient conditions. |
| **Chemical stability** | Stable under recommended storage conditions. |
| **Possibility of hazardous reactions** | None known under normal conditions of use. |
| **Conditions to avoid** | Heat, flames and sparks. |
| **Incompatible materials** | Strong oxidizing agents. |
| **Hazardous decomposition products** | Carbon oxides. |

## SECTION 11: Toxicological information

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| **Acute toxicity - Oral / Inhalation / Dermal** | LD50 Oral - Rat - > 1000 mg/kg |
| **Skin corrosion/irritation** | Not irritating to skin (based on available data). |
| **Serious eye damage/irritation** | Dust may cause mechanical eye irritation. |
| **Respiratory or skin sensitization** | Not expected to cause sensitization. |
| **Germ cell mutagenicity** | Polymer itself not mutagenic; residual acrylamide monomer content is controlled. |

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| **Carcinogenicity** | Not classified (polyacrylamide not listed by IARC/NTP). |
| **Reproductive toxicity** | Not classified |
| **STOT - single exposure** | None known. |
| **STOT - repeated exposure** | None known. |
| **Aspiration hazard** | Not applicable (solid). |

## SECTION 12: Ecological information

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| **Toxicity to fish / daphnia / algae** | Low acute toxicity to aquatic organisms: LC50 (fish, 96 h) > 100 mg/l; EC50 (Daphnia magna, 48 h) > 100 mg/l. |
| **Persistence and degradability** | Not readily biodegradable; degrades slowly by mechanical and chemical action. |
| **Bioaccumulative potential** | Not bioaccumulative (high molecular weight polymer, not taken up by organisms). |
| **Mobility in soil** | Adsorbs strongly to soil and sediment; low mobility. |
| **Other adverse effects** | None known. |

## SECTION 13: Disposal considerations

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| **Product disposal methods** | Offer surplus and non-recyclable product to a licensed disposal company. Dispose of in accordance with local regulations. |
| **Contaminated packaging** | Dispose of as unused product. |

## SECTION 14: Transport information

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| **UN Number (ADR/RID, IMDG, IATA)** | Not regulated as dangerous goods |
| **UN Proper Shipping Name** | Not regulated as dangerous goods |
| **Transport hazard class(es)** | Not regulated as dangerous goods |
| **Packing group** | Not applicable |
| **Environmental hazards (Marine pollutant)** | No |
| **Special precautions for user** | None known. |

## SECTION 15: Regulatory information

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| **Safety, health and environmental regulations specific for the product** | EINECS: Listed; TSCA: Listed; IECSC: Listed; DSL: Listed. |

## SECTION 16: Other information

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| **Full text of H-Statements** | None (not classified as hazardous) |
| **Revision date** | 2026-10-29 |
| **Version** | 1.0 |

**Abbreviations and acronyms:** CAS: Chemical Abstracts Service; EC: European Commission; EINECS: European Inventory of Existing Commercial Chemical Substances; ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; RID: Regulation concerning the International Carriage of Dangerous Goods by Rail; IMDG: International Maritime Dangerous Goods; IATA: International Air Transport Association; TWA: Time Weighted Average; STEL: Short Term Exposure Limit; LD50: Lethal Dose 50%; LC50: Lethal Concentration 50%; EC50: Effective Concentration 50%; PBT: Persistent, Bioaccumulative and Toxic; vPvB: very Persistent and very Bioaccumulative; SDS: Safety Data Sheet.

**References:** ECHA - European Chemicals Agency, https://echa.europa.eu/; IPCS - International Chemical Safety Cards (ICSC), http://www.ilo.org/; HSDB - Hazardous Substances Data Bank; eChemPortal - OECD Global Portal to Information on Chemical Substances; ERG - Emergency Response Guidebook by U.S. DOT.

**Disclaimer:** The information in this SDS is only applicable to the specified product and is provided in good faith. It is based on the knowledge available to Richest Group Ltd. at the date of issue and is intended to describe the product for the purposes of health, safety and environmental requirements only. It does not constitute any guarantee of the properties of the product. Richest Group Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product.