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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product: Acrylic Acid	**Revision date:** 2026-10-29	**Version:** 1.0	**Brand:** Richest

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

Product name	Acrylic Acid
Synonyms	Propenoic acid; Glacial acrylic acid; Acroleic acid
CAS No.	79-10-7
EC No.	201-177-9
Molecular formula	C3H4O2
Molecular weight	72.06 g/mol
Relevant identified uses	Monomer for the production of acrylic esters, superabsorbent polymers (SAP), water treatment polymers, coatings and adhesives; industrial raw material; laboratory chemicals
Uses advised against	None
Company	Richest Group Ltd.
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SECTION 2: Hazards identification

GHS Classification	Flammable liquids Category 3 Acute toxicity - Oral Category 4 Acute toxicity - Dermal Category 4 Acute toxicity - Inhalation Category 4 Skin corrosion Category 1A Specific target organ toxicity - single exposure Category 3 (Respiratory system) Short-term (acute) aquatic hazard Category 1
Pictogram(s)	GHS02 (Flame), GHS05 (Corrosion), GHS07 (Exclamation mark), GHS09 (Environment)

Signal word	Danger
Hazard statement(s)	H226 Flammable liquid and vapour. H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation. H400 Very toxic to aquatic life.
Precautionary statement(s)	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Other hazards	None known.

SECTION 3: Composition/information on ingredients

Component	Acrylic acid
CAS No.	79-10-7
EC No.	201-177-9
Classification	Flam. Liq. 3; Acute Tox. 4; Skin Corr. 1A; STOT SE 3; Aquatic Acute 1; H226, H302, H312, H332, H314, H335, H400
Concentration (%)	≤100 %

SECTION 4: First aid measures

If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Most important symptoms and effects	Causes severe skin burns and eye damage. May cause respiratory irritation, cough, shortness of breath; extremely destructive to tissue of the mucous
Indication of any immediate medical attention	Consult a physician. Show this safety data sheet to the doctor in attendance.

SECTION 5: Firefighting measures	
Suitable extinguishing media	Alcohol-resistant foam, dry powder, carbon dioxide (CO2), water spray
Unsuitable extinguishing media	Do NOT use water jet.
Special hazards arising from the chemical	Carbon oxides. Flash back possible over considerable distance.
Advice for firefighters	Wear self-contained breathing apparatus for firefighting if necessary. Use water spray to cool unopened containers.

SECTION 6: Accidental release measures	
Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods and materials for containment and cleaning up	Contain spillage, and then collect with non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations.

SECTION 7: Handling and storage	
Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in a cool place. Hygroscopic.

SECTION 8: Exposure controls/personal protection	
Occupational exposure limit values	ACGIH TLV: 2 ppm TWA (skin); EU OEL: 29 mg/m³
Biological limit values	No biological exposure index (BEI) established.
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Wash hands before breaks and at the end of
Eye/face protection	Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
Skin protection	Handle with gloves. Gloves must be inspected prior to use. Full contact: butyl rubber, minimum layer thickness 0.3 mm, breakthrough time 480 min. Splash

	contact: nitrile rubber, minimum layer thickness 0.2 mm, breakthrough time 30 min (EN 374). Wash and dry hands after use.
Body protection	Complete suit protecting against chemicals; flame retardant antistatic protective clothing.
Respiratory protection	Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.
Thermal hazards	May polymerize on heating; keep away from heat.

SECTION 9: Physical and chemical properties

Physical state	Liquid
Colour	Colourless
Odour	Pungent, acrylic-like odour
Melting point / freezing point	14 °C (lit.)
Boiling point or initial boiling point and boiling range	141 °C (lit.)
Flammability	Flammable liquid and vapour
Lower and upper explosion limit / flammability limit	Lower explosion limit: 2.4 % (V); Upper explosion limit: 8.0 % (V)
Flash point	50 °C (closed cup)
Auto-ignition temperature	360 °C
Decomposition temperature	200 °C
pH	ca. 2.5 (50 g/l in water, 20 °C)
Kinematic viscosity	ca. 1.2 mm2/s at 20 °C
Solubility	Miscible with water; miscible with alcohol, ether and acetone
Partition coefficient n-octanol/water	log Pow: 0.35 (at 25 °C)
Vapour pressure	ca. 4 hPa at 20 °C
Density and/or relative density	1.051 g/cm3 at 25 °C
Relative vapour density	2.5 (Air = 1.0)
Particle characteristics	Not applicable (liquid)

SECTION 10: Stability and reactivity	
Reactivity	Reacts violently in contact with acids, amines and oxidizing agents; polymerisation can occur.
Chemical stability	Stable under recommended storage conditions. Polymerizes readily unless inhibited (typically inhibited with MEHQ).
Possibility of hazardous reactions	Reacts violently in contact with acids, amines, driers, polymerisation accelerators and easily oxidized materials. Polymerisation can occur.
Conditions to avoid	Heat, flames and sparks. Loss of inhibitor may cause polymerisation.
Incompatible materials	Strong oxidizing agents, acids, amines, polymerisation accelerators, easily oxidized materials
Hazardous decomposition products	Carbon oxides (formed under fire conditions)

SECTION 11: Toxicological information	
Acute toxicity - Oral / Inhalation / Dermal	LD50 Oral - Rat - 193 mg/kg LC50 Inhalation - Rat - 4 h - 3.6 mg/l (vapour) LD50 Dermal - Rabbit - 640 mg/kg
Skin corrosion/irritation	Skin - Rabbit: Causes burns.
Serious eye damage/irritation	Eyes - Rabbit: Causes burns. Causes serious eye damage.
Respiratory or skin sensitization	Sensitisation test - Guinea pig: negative.
Germ cell mutagenicity	Ames test (Salmonella typhimurium): negative. Mutagenicity (mammalian cell test): negative.
Carcinogenicity	Did not show carcinogenic effects in animal experiments. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	Not classified (based on available data)
STOT - single exposure	May cause respiratory irritation - Respiratory system.
STOT - repeated exposure	Not classified (based on available data)
Aspiration hazard	Not classified (based on available data)

SECTION 12: Ecological information	
Toxicity to fish / daphnia / algae	Toxicity to fish: LC50 - Oncorhynchus mykiss (rainbow trout) - 27 mg/l - 96 h Toxicity to daphnia: EC50 - Daphnia magna (Water flea) - 47 mg/l - 48 h Toxicity to algae: IC50 - Desmodesmus subspicatus (green algae) - 0.13 mg/l - 72 h; NOEC - Chlorella vulgaris - 0.2 mg/l - 72 h
Persistence and degradability	Readily biodegradable (81%, OECD 301D); readily eliminated from water

	(100%, OECD 302B).
Bioaccumulative potential	No bioaccumulation potential (log Pow = 0.35).
Mobility in soil	Likely to be mobile in soil due to high water solubility.
Other adverse effects	Very toxic to aquatic life. Neutralise before sewage disposal.

SECTION 13: Disposal considerations

Product disposal methods	Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste.
Contaminated packaging	Dispose of as unused product.

SECTION 14: Transport information

UN Number (ADR/RID, IMDG, IATA)	2218
UN Proper Shipping Name	ACRYLIC ACID, STABILIZED
Transport hazard class(es)	8 (3)
Packing group	II
Environmental hazards (Marine pollutant)	ADR/RID: Yes; IMDG Marine pollutant: Yes; IATA: No
Special precautions for user	Keep containers upright, closed and secured during transport.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	EINECS: Listed (201-177-9) TSCA: Listed IECSC: Listed China Catalog of Hazardous Chemicals 2015: Listed

SECTION 16: Other information

Full text of H-Statements	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H332 Harmful if inhaled. H335 May cause respiratory irritation. H400 Very toxic to aquatic life.
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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.