



SAFETY DATA SHEET

POLY ALUMINUM CHLORIDE (PAC)

Prepared according to OSHA Hazard Communication Standard 29 CFR 1910.1200 / GHS format

SECTION 1: IDENTIFICATION

Product Identifier	Poly Aluminum Chloride (PAC)
Synonyms	Polyaluminum chloride; Polyaluminium chloride; Aluminum chlorohydrate
CAS Number	1327-41-9
Manufacturer / Distributor	BASEKIM KIMYASAL URUNLER IC VE DIS TICARET LIMITED SIRKETI
Address	ILKBAHAR MAH. FAHREDDIN PASA SK. NO: 6 CANKAYA/ANKARA
Company Phone	+903125147055
Emergency Phone	+903125147055
Recommended Use	Industrial manufacturing
Restrictions on Use	For professional use only

SECTION 2: HAZARD(S) IDENTIFICATION

SIGNAL WORD: DANGER

GHS Classification	Corrosive to metals - Category 1; Serious eye damage - Category 1; Skin irritation - Category 2 may apply depending on concentration and form.
GHS Pictograms	Corrosion pictogram (GHS05).
Hazard Statements	H290: May be corrosive to metals. H318: Causes serious eye damage. H315: Causes skin irritation.
Precautionary Statements	Keep only in original container. Avoid breathing dust, mist, or aerosols. Wear protective gloves, protective clothing, and eye/face protection. Wash thoroughly after handling.
Other Hazards	Dust or mist may irritate the respiratory tract. Product may be acidic in solution and may attack some metals.

- Eye contact may cause severe irritation or serious eye damage.
- Skin contact may cause irritation, redness, or discomfort.
- Inhalation of dust or mist may cause respiratory tract irritation.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Poly Aluminum Chloride
CAS Number	1327-41-9
Typical Concentration	Commercial product; concentration and basicity vary by grade. Treat



	as hazardous according to supplied product specification.
Molecular / Structural Formula	[Al ₂ (OH) _n Cl _{6-n}] _m , polymeric aluminum hydroxychloride
Impurities / Additives	No hazardous impurities known at levels requiring disclosure in this summary.

SECTION 4: FIRST-AID MEASURES

Eye Contact	Immediately rinse cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing and obtain medical attention.
Skin Contact	Remove contaminated clothing. Wash skin with plenty of water and soap. Get medical advice if irritation persists.
Inhalation	Move person to fresh air and keep comfortable for breathing. Seek medical attention if symptoms occur.
Ingestion	Rinse mouth. Do not induce vomiting. Never give anything by mouth to an unconscious person. Obtain medical advice.
Most Important Symptoms	Eye pain, tearing, redness, skin irritation, coughing, throat irritation, and gastrointestinal discomfort.
Required Treatment	Treat symptomatically. Show this SDS to medical personnel.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Use extinguishing media appropriate for surrounding fire: water spray, dry chemical, carbon dioxide, or foam.
Unsuitable Media	No specific restriction known. Avoid high-pressure water jets where they may spread material.
Specific Fire Hazards	Product is not considered combustible. Heating or decomposition may release hydrogen chloride fumes and aluminum oxides.
Protective Equipment	Firefighters should wear self-contained breathing apparatus and full protective clothing.
Fire-fighting Advice	Move containers from fire area if safe. Cool exposed containers with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with eyes, skin, and clothing. Avoid breathing dust, mist, or aerosols. Use appropriate PPE.
Emergency Procedures	Isolate area. Provide adequate ventilation. Keep unauthorized personnel away.
Environmental Precautions	Prevent release to drains, surface water, and soil. Notify authorities if significant release occurs.
Containment	Contain spill with inert absorbent, sand, or earth. For dry material,



	avoid dust generation.
Cleanup Methods	Collect mechanically or absorb liquid spill. Place in compatible labeled containers for disposal. Wash residue with water after collection.

SECTION 7: HANDLING AND STORAGE

Safe Handling	Handle in well-ventilated areas. Avoid eye and skin contact. Avoid dust and mist formation. Do not eat, drink, or smoke when using.
Hygiene Measures	Wash hands and exposed skin after handling. Remove contaminated clothing before reuse.
Storage Conditions	Keep container tightly closed in a cool, dry, well-ventilated area. Store in original, corrosion-resistant container.
Incompatibilities	Strong oxidizing agents, strong bases, reactive metals, and materials sensitive to acidic conditions.
Packaging	Use compatible plastic, lined steel, or other corrosion-resistant packaging suitable for PAC grade.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA PEL	No product-specific OSHA PEL established. Manage nuisance dust under applicable particulate exposure limits where relevant.
ACGIH TLV	No product-specific ACGIH TLV established. Follow applicable limits for particulates not otherwise specified and aluminum compounds where applicable.
Engineering Controls	Use local exhaust ventilation or closed handling where dust or mist may be generated. Provide eyewash and safety shower.
Eye / Face Protection	Chemical safety goggles and face shield where splashing is possible.
Skin Protection	Chemical-resistant gloves and protective clothing. Select glove material according to exposure duration and product form.
Respiratory Protection	Use approved particulate or mist respirator if ventilation is inadequate or exposure limits may be exceeded.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White to pale yellow powder, granules, or yellow to amber aqueous solution depending on grade.
Odor	Odorless to slight characteristic odor.
pH	Typically acidic in aqueous solution; commonly about 2.5-5.0 depending on concentration/basicity.
Melting / Freezing Point	Not determined / not applicable for polymeric commercial grades.
Boiling Point	Not applicable for dry solid; aqueous solutions approximately near water depending on concentration.
Flash Point	Not applicable; not combustible.



Flammability	Not classified as flammable.
Vapor Pressure	Not significant for dry product; aqueous solution similar to water.
Relative Density	Varies by grade; aqueous solutions commonly approx. 1.1-1.4 g/cm ³ .
Solubility	Soluble or dispersible in water.
Partition Coefficient	Not applicable for inorganic polymeric salt.
Decomposition Temperature	May decompose at elevated temperatures, releasing hydrogen chloride.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	May be corrosive to metals, especially in aqueous acidic conditions.
Chemical Stability	Stable under recommended storage and handling conditions.
Hazardous Reactions	No dangerous polymerization expected. Reaction with strong bases may generate heat.
Conditions to Avoid	Moisture ingress for dry product, excessive heat, dust generation, and incompatible materials.
Incompatible Materials	Strong oxidizers, strong bases, reactive metals, and materials attacked by acidic salts.
Hazardous Decomposition Products	Hydrogen chloride fumes and aluminum oxides under thermal decomposition.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure	Eye contact, skin contact, inhalation of dust/mist, ingestion.
Acute Effects	Causes serious eye damage. May cause skin and respiratory irritation. Ingestion may cause gastrointestinal irritation.
Delayed / Chronic Effects	Repeated exposure to dust or mist may aggravate respiratory irritation. No product-specific chronic toxicity data available in this summary.
Numerical Toxicity	Product-specific values vary by grade; reported oral and dermal LD ₅₀ values for PAC products are commonly greater than 2000 mg/kg in rats in supplier SDS data.
Carcinogenicity	Not listed as a carcinogen by OSHA, IARC, or NTP based on available supplier SDS information.
Symptoms	Redness, tearing, pain, coughing, sore throat, skin irritation, nausea, or abdominal discomfort.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	May be harmful to aquatic life through pH shift and aluminum salt effects at elevated concentrations.
Persistence / Degradability	Inorganic polymeric salt; biodegradation is not applicable.



Bioaccumulation	Bioaccumulation is not expected for inorganic aluminum salts.
Mobility in Soil	Soluble/dispersible in water; mobility depends on pH and water chemistry.
Other Adverse Effects	Avoid uncontrolled release to waterways, drains, or soil.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment	Dispose of contents/container according to local, regional, national, and international regulations.
Product Disposal	Do not discharge untreated product to drains. Neutralization and treatment may be required by qualified personnel.
Packaging Disposal	Empty containers may retain residue. Rinse or dispose of as chemical waste according to regulations.
Special Precautions	Waste classification depends on contamination, product form, and local regulations.

SECTION 14: TRANSPORT INFORMATION

UN Number	UN 3264 may apply for corrosive acidic inorganic liquid, n.o.s.; classification depends on product concentration/form and transport regulations.
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (contains Poly Aluminum Chloride) when regulated.
Transport Hazard Class	Class 8, Corrosive, when regulated.
Packing Group	III, where applicable.
Environmental Hazards	Not generally classified as marine pollutant based on available data; verify shipment-specific classification.
Special Precautions	Ship in corrosion-resistant, tightly closed containers. Confirm classification with the latest carrier and regulatory requirements.

SECTION 15: REGULATORY INFORMATION

OSHA HCS	Hazardous chemical under OSHA Hazard Communication Standard when classified for corrosive/irritant hazards.
GHS Label Elements	Signal word: Danger. Pictogram: Corrosion. Hazard statements include H290 and H318 where applicable.
TSCA / Inventory	Verify inventory status according to supplier and jurisdiction before import or use.
SARA / CERCLA	No product-specific listing provided in this summary; applicability depends on formulation and impurities.
California Proposition 65	No listed ingredient identified in this summary; verify current supplier formulation.
International Regulations	Classification and labeling may vary under CLP, WHMIS, and other



regional systems.

SECTION 16: OTHER INFORMATION

Preparation / Revision Date	May 12, 2026
Version	1.0
Prepared For	BASEKIM KIMYASAL URUNLER IC VE DIS TICARET LIMITED SIRKETI
Disclaimer	This SDS summary is prepared for professional industrial communication. It does not replace the supplier/manufacturer's official SDS and should be verified against product-specific composition, concentration, and local regulatory requirements before use.
Key Abbreviations	OSHA: Occupational Safety and Health Administration; PEL: Permissible Exposure Limit; ACGIH: American Conference of Governmental Industrial Hygienists; TLV: Threshold Limit Value; GHS: Globally Harmonized System.