Material Safety Data Sheet (MSDS) - Poly Aluminum Chloride

1. PRODUCT AND COMPANY IDENTIFICATION

Product identification:
- **Product Name**: Poly Aluminium Chloride
- **Synonyms**: PAC, Poly Aluminium Hydrochloride
- **Molecular Weight/Chemical Formula**: Formula \{Aln (OH)m Cl3n-m\} x containing 9.5 W/W Al2O3 minimum
- **CAS No.**: 1327-41-9

COMPANY IDENTIFICATION
- **Supplier**: Pon Pure Chemicals Group
  - CHENNAI, TAMILNADU, INDIA
- **24 Hour Health Emergency Phone**: (91) 8939878447
- **Transportation Emergency Phone**: (91) 9444038694

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<tr>
<th>Company Name</th>
<th>Place</th>
<th>EMERGENCY TELEPHONE NUMBER</th>
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<td>Pon Pure Chemicals Group</td>
<td>India</td>
<td>Day Emergency – 044-26161803-26161809</td>
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2. COMPOSITION/ INFORMATION ON INGREDIENTS

- **Chemical Family**: Acid
- **Ingredients contributing to the hazard**: Poly Aluminum Chloride
- **Chemicals abstract registry number**: 1327-41-9

3. HAZARDS IDENTIFICATION

- **Most important hazard**: Mild Irritant
- **Safety Phrases**: Keep out of reach of children. In case of contact with skin wash immediately with plenty of water.

4. FIRST AID MEASURES

- **Skin and Eye Contact**: Wash with copious amounts of water.
- **Inhalation**: Remove from contaminated area. Obtain medical attention.
- **Ingestion**: Do not induce vomiting. Administer a 5% solution of Sodium bicarbonate followed by milk. Obtain medical attention

5. FIRE FIGHTING MEASURES

- **Extinguishing Media**: Poly Aluminium Chloride is nonflammable.

6. ACCIDENTAL RELEASE MEASURES

- **Personal Precautions**: Wear protective clothing. See Section 8 of this Data

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Environmental Precautions: Where a spillage or contaminated washings causes contamination of water courses, drains or vegetation inform relevant authorities.

Clean up procedure: Contain all spillage of PAC. Dispose of using licensed waste disposal contractors.

7. HANDLING AND STORAGE
Handling Precautions: Wear Protective clothing. Safety showers and eye wash facilities should be provided in areas where an accidental exposure is possible. Once diluted it should be used as soon as possible.
Storage: Poly Aluminum Chloride becomes unstable when stored or transported for some time at temperatures higher than 40 degree C. PAC tends to hydrolyse to a white turbid solution and loses effectiveness when it is kept long a diluted solution of less than approximately 3% (as Al2O3)
Compatible Materials: Lead, Ebonite coated Steel (4 mm Thickness, min.), Rubber, Glass Fibre, Glass HDPE, PVC.
Incompatible Materials: Mild Steel, Copper, Zinc, Silver.
Other Information: The storage area should have a non-combustible & corrosion resistant floor.

8. EXPOSURE CONTROL/ PERSONAL PROTECTION
Personal Protective Equipment: Protective overalls, Rubber gloves, Eye goggles / Face shield, Hard hat, Acid resistant boots.

9. PHYSICAL AND CHEMICAL PROPERTIES
Colour: Amber - Light Pale Yellow
Odour: Odourless
pH Value: 2.3 ± 0.3 (3.5 ± 0.5 of 5% aqueous solution) - (at g/l H2O) at 20 degree C
Density: 1.2 ± 0.05 - G/Cm3 at 20 degree C
Molecular Weight: Formula {Aln (OH)m Cl3n-m}x containing 9.5 W/W Al2O3 minimum
Chemical Characteristics: Olygomer, Aluminium Poly Chloride Compound.
Solubility: Highly soluble, miscible in all proportion
Melting Point: -
Freezing Point: (-)10 degree C
Flash Point: Non Flammable
Ignition Temperature: Not Applicable
Explosive Properties : Not Applicable
Partition coefficient (Water) : Not Known
Viscosity : 4 ± 0.4 cSt at 20 degree C

10. STABILITY AND REACTIVITY
Stability : As supplied Poly Aluminium Chloride is stable at normal temperatures and pressures.
Reactivity : No Reaction
Air : No Reaction
Water : Coagulates substances suspended or dispersed in water to settle quickly to form a filterable sludge
Acids : With hydrochloric acid or sulphuric acid bulk precipitation of solid occur

11. TOXICOLOGICAL INFORMATION
Basis / Alkalis : Bulk precipitation occurs with evolution of heat.
Skin/Eye: Causes Irritation
Skin absorption : Repeated skin exposure may cause Dermatitis
Ingestion: Irritation of mucous membrane brought into direct contact.
Toxicity : Acute oral toxicity in mice 34.5 g/kg.

12. ECOLOGICAL INFORMATION
The product undergone tests with various concentrations, proved to be entirely harmless to aquatic life up to concentration of 200 mg/l expressed as Al2O3 (corresponding to 2 g/l of PAC AC/100 S).

13. DISPOSAL CONSIDERATIONS
Spillages : See Section 6 of this Data Sheet.
Waste : Dispose of PAC using a licensed waste disposal contractor.

14. TRANSPORTATION INFORMATION
UN No. / GGVE / GGVS : See IMDG Code ICAO / IATA – DGR : Class 8 UN 1760
IMDG Code : IMDG Code Class N degree 8UN 1760 IMDG Code Page 8070
RID / ADR : Class 8.5 degree C

15. REGULATORY INFORMATION
Symbol(s) : Mild Irritant
R-Phrases(s) : R38 – Irritating to skin
S-Phrases(s) : S26 – Keep out of reach of children In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice.
S2 – Keep out of reach of children
16. MISCELLANEOUS INFORMATION

Disclaimer:

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