

## TECHNICAL DATA SHEET (TDS)

### *Poly Aluminum Chloride (PAC) – Y12*

#### **GENERAL INFORMATION**

**PURICALS PAC-Y12** is a high-purity polymerized aluminum chloride coagulant for water and wastewater treatment applications. It excels in neutralizing colloidal charges, leading to the formation of dense flocs that enhance slurry drainage through sedimentation or flotation. The products of this company are produced by skilled experts with up-to-date technology, so that the quality fulfills the European standard “Chemicals used for treatment of water intended for human consumption” EN 17034:2018 • NSF/ANSI 60: Drinking Water Treatment Chemicals – Health Effects.

#### **Key Benefits**

- ✓ Ensures water quality with high purity water.
- ✓ Demonstrates excellent coagulation, flotation, and sedimentation for efficient treatment.
- ✓ Effectively removes phosphorus to enhance water quality.
- ✓ Offers environmental benefits by minimizing chemical sludge and reducing transportation costs.

#### **Applications**

- Drinking water
- Industrial water treatment
- Wastewater treatment
- Pulp & Paper industry

#### **Product Specifications**

| <i>Item</i>                        | <i>Standards</i>   |
|------------------------------------|--------------------|
| Appearance                         | Pale Yellow Liquid |
| Al <sub>2</sub> O <sub>3</sub> wt% | 12 ± 1             |
| Basicity wt%                       | Min. 64            |
| Specific Gravity at 25 °C          | Min. 1.2           |
| pH (5% water solution)             | 2.5 - 4.5          |
| As (mg/kg)                         | Max. 5.0           |
| Mn (mg/kg)                         | Max. 100.0         |
| Cr <sup>6+</sup> (mg/kg)           | Max. 15.0          |
| Hg (mg/kg)                         | Max. 0.2           |
| Pb (mg/kg)                         | Max. 30.0          |
| Cd (mg/kg)                         | Max. 6.0           |

## PRODUCT SAFETY INFORMATION

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>- Keep containers tightly closed and avoid direct contact with skin, eyes, and clothing.</li><li>- Do not inhale or ingest dust, vapors, or mist; ensure proper ventilation.</li><li>- Avoid eating, drinking, or smoking while handling the product.</li><li>- In case of skin or eye contact, rinse immediately with plenty of water and seek medical attention.</li><li>- Store in a cool, dry, and well-ventilated area, away from incompatible substances.</li><li>- Use protective equipment, including acid-resistant gloves and safety goggles.</li><li>- Contain and neutralize spills, preventing environmental contamination.</li></ul> |                                                                                                                                                                                                                                        | <div>DOT CODE</div> <div>UN 1759</div>                                                         | <div>GHS CODE</div> <div>Corrosive to Metals Cat 1</div> <div>Acute Toxicity, Oral Cat 4</div> <div>Skin Corrosion/Irritation Cat 2</div> <div>Serious Eye Damage/Eye Irritation Cat 1</div> <div>Specific Target Organ Toxicity, Single Exposure Cat 2 (systemic).</div> <div>Hazardous to the Aquatic Environment, Acute Hazard Cat 2</div> <div>Hazardous to the Aquatic Environment, Long-terms Hazard Cat 2</div> | <div>HMIS CODE</div>                                                                                                                                    |
| <div>Hand protection:</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Wear chemical-resistant gloves (nitrile, PVC, or neoprene) to prevent skin contact. Replace if damaged or worn.                                                                                                                        | <div></div> | <div></div>                                                                                                                                               | <div><div>HEALTH</div><div>2.</div><div>FLAMMABILITY</div><div>0</div><div>REACTIVITY</div><div>1</div><div>PERSONAL PROTECTION</div><div>P</div></div> |
| <div>Eye protection:</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Wear chemical-resistant gloves (nitrile, PVC, or neoprene) to prevent skin contact. Replace if damaged or worn.                                                                                                                        |                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                         |
| <div>Respiratory protection:</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Use a respirator with an acid gas cartridge or a full-face air-purifying respirator if exposure limits are exceeded or when adequate ventilation is not available. Ensure proper fit to prevent inhalation of harmful vapors or mists. |                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                         |

## STORAGE INFORMATION

Polyaluminum chloride solution is acidic and is considered as a corrosive substance. To store liquid polyaluminum chloride, GRP, GRVE or PVC tanks should be used. Pumps, pipes or hoses used for PAC transfer are recommended to be made of PVC or other materials that are resistant to acidic pH and chloride



### ***DELIVERY***

The liquid product is presented in HOPE barrels of 60 and 220 liters. If the consumer needs, it is possible to supply in different forms of packaging, and also liquid PAC can be transferred by tankers.

### ***NOTE***

Refer to the SDS for further health, safety and environmental information regarding this product. Information and recommendations in this technical data sheet are based on information believed to be reliable. However, the use of the product is beyond our control, and no guarantee expressed or implied is made as to the effects of such the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility including injury or damage, resulting from misuse of the product as such, or combination with other materials.

