

# **DELPAC 1842 STORAGE AND HANDLING**

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## Shipment

DelPAC 1842 may be shipped in fiberglass and rubber lined which conform to D.O.T. specifications as well as the laws of the states in which they operate.

The average shipment is 4,000 gallons or approximately 45,000 pounds.

DelPAC 1842 is unloaded through 2 inch reinforced rubber hose using air pressure supplied by the truck's air compressor. The fittings are 2-inch cam & groove quick connect couplers.

### Storage and Handling

Tanks for receiving tank truck deliveries should be 1.5 times the delivery amount or a minimum of 6,000 gallons capacity. An easy means of determining the level in the tanks should be available, such as a sight tube or dip stick, so that the tank will not be overfilled during delivery.

The tank should have a minimum of a 6" vent to relieve air pressure during the unloading process. Air vented from the tank may contain small amounts of hydrochloric acid and should be released/processed in accordance with local, state or federal regulations. The tank should also have proper overflow protection and containment. Note: exposed metal will oxidize in areas near DelPAC 1842 storage.

For optimum product performance, DelPAC 1842 should be consumed within six (6) months of delivery. Exposure to temperatures >90F may shorten consumption time. Storage tanks should be emptied and inspected annually.

#### **Equipment and Piping**

Storage Tanks: Tanks may be constructed of fiberglass/epoxy, lined steel. Polypropylene or polyethylene tanks have also been used.

Tank should be rated for a service temperature of up to 160°F.

Piping: Schedule 80 CPVC or polymer lined piping can be used. Glass reinforced plastic or hard rubber are also suitable materials for piping.

Gravity feed when possible. Initial pump cost and maintenance are eliminated. When centrifugal pumps are used they should be sized for head and flow requirements. Wetted pump parts should be of poly lined, plastic or fiberglass. Packing may be of graphite or Teflon.

Compatible gasket materials include Teflon, neoprene or rubber.

There are several types of valves suitable for handling DelPAC 1842. Their wetted parts should be of Teflon, PVC, Hastelloy C, or rubber lined construction.

Feed rates and metering can be accomplished using rotameters, volumetric displacement pumps, weighing devices and mechanical feeders. The wetted parts of these devices should be constructed of Teflon, PVC, Hastelloy C or rubber.

Maintenance of the equipment should follow general industry standards and manufacturer's recommendations.

Piping and pumps taken out of service for more than thirty days should be thoroughly rinsed with water.





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### **Properties**

 $\begin{array}{lll} \text{SpecificGravity} & 1.37 \underline{+} \ 0.03 \\ \text{Freezing Point} & < 0^{\circ} \text{F} \\ \text{Boiling Point} & 230^{\circ} \text{F} \\ \text{pH} & 0.5 + 0.4 \\ \end{array}$ 

# **DelPAC 1842**

Basic Aluminum Chloride CAS # 1327-41-9 Solubility in Water 100 %

Evaporation Rate Same as water

Stability - product degrades at elevated temperatures. Avoid temperatures above 113° F

## Safety

DelPAC 1842 is an acidic, inorganic, corrosive liquid and must be handled with caution.

DelPAC 1842 is hazardous in case of eye contact (irritant, corrosive), of skin contact (irritant, corrosive), of ingestion (corrosive)

There is a risk of serious damage to eyes. Redness, watering, and itching characterize inflammation of the eye.

Skin contact may cause burns. Skin exposure is characterized by itching, scaling, reddening or occasionally, blistering.

Inhalation of the spray mist may cause irritation of the respiratory tract, characterized by coughing, choking or shortness of breath. Liquid or spray mist may cause tissue damage, particularly on mucous membranes of eyes, mouth and respiratory tract.

#### Suggested first aid for contact with basic aluminum chloride:

Inhalation: Remove from exposure; seek medical treatment if any symptoms occur.

Eye Contact: Immediately flush with water for at least 15 minutes, occasionally lifting upper and lower lids. Seek medical attention immediately.

Skin Contact: Immediately rinse the affected area with tepid water, removing contaminated clothing. Rinse with water for a minimum of 15 minutes. Seek medical attention if there is any indication of a chemical burn.

<u>Ingestion:</u> Do not induce vomiting. If conscious, have the victim rinse mouth then drink large amounts of water. Seek medical attention immediately.

DelPAC 1842 may be very slippery if spilled on stairways, walkways or floors and may be a significant slip hazard.

#### Spill Cleanup

Contain major spills to prevent entering water sources and sewers. Very minor spills may be washed to a chemical sewer, neutralized with soda ash to a pH of 5-9 or absorbed with an inert material.

Local and state regulations may require reporting of spills of a hazardous material. Spills occurring during the shipment of a hazardous material or during loading/unloading operations may have to be reported to the Department of Transportation (DOT) as specified in 49 CFR §171.16 Detailed hazardous materials incident re-ports.

If a facility plans to respond to a spill of DelPAC 1842, the facility must have an emergency action plan and must train their employees. The requirements for planning and training can be found in 29 CFR §1910.120 Hazardous waste operations and emergency response.

Disposal of any hazardous material must comply with local, state and federal regulations. The proper disposal of DelPAC 1842 spill residuals will be dependent on the circumstances of the spill.

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