DELPAC 2000 STORAGE AND HANDLING

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Shipment

DelPAC 2000 may be shipped in fiberglass, rubber lined and 316 stainless steel trucks which conform to D.O.T. specifications as well as the laws of the states in which they operate.

The average shipment is 4,500 gallons or approximately 45,000 pounds.

DelPAC 2000 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 6,750 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.

For optimum product performance, DelPAC 2000 should be consumed within six (6) months of delivery.

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.

Piping: Schedule 80 PVC or polymer lined piping can be used. Glass reinforced plastic or hard rubber are also suitable materials for piping. Due to the high coefficient of expansion for PVC and CPVC, piping made of these materials should not be anchored at both ends of a piping run and must be adequately supported when in-stalled.

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 2000. Their wetted parts should be of Teflon, PVC, Hastelloy C, or rubber lined construction.

Feed rates and metering can be accomplished using rotameters, volumetric dis-placement 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.
**DELPAC 2000 STORAGE AND HANDLING**

### DelPAC 2000

Aluminum Chloride Hydroxide Sulfate  
CAS # 39290-78-3

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Gravity</td>
<td>1.2 min.</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>-26°F</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>230°F</td>
</tr>
<tr>
<td>pH</td>
<td>2.1 – 3.5</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>100%</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Same as water</td>
</tr>
<tr>
<td>Stability</td>
<td>Product degrades at elevated temperatures. Avoid temperatures above 113°F</td>
</tr>
</tbody>
</table>

### Safety

DelPAC 2000 is a corrosive hazardous material and must be handled with care. DelPAC 2000 is acidic with a pH of 2.1 – 3.5 and is slightly hazy to clear with variable color. It is not volatile or flammable.

Precautions should be taken to prevent spraying or splashing. Under normal conditions, DelPAC 2000 will not generate mists or vapors. No special ventilation is recommended. Have emergency eyewash stations, safety/quick-drench showers, and washing facilities available in the work area.

Avoid ingestion and contact with the skin. There is a risk of serious damage to eyes. Wear personal protective equipment when there is a possibility of being splashed or sprayed. Close fitting chemical splash goggles are recommended to protect the eyes. Rubber or neoprene gloves and boots, and a rubber apron, PVC, acid or chemical resistant suit may also be used to protect the employee.

In case of contact with eyes, rinse immediately with plenty of water (15 minutes is the recommended minimum time) and seek medical advice. In case of contact with skin, flush immediately from the skin with large amounts of water, since prolonged contact may cause tissue damage. Seek medical advice if any symptoms appear.

DelPAC 2000 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 2000, 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 2000 spill residuals will be dependent on the circumstances of the spill.

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