

Water Technologies & Solutions fact sheet

Novus* CE2681E

- Increases efficiency of sludge dewatering operations
- Improves suspended solids removal operations and effluent quality
- Easily fed liquid emulsion

description and use

Novus CE2681E is a liquid, low charge density, high molecular weight cationic emulsion polymer. This product may be used effectively in solid/liquid separation applications and sludge dewatering. It is designed to function in a total SUEZ treatment programme.

typical applications

Novus CE2681E is very effective in sludge dewatering operations. Benefits include higher solids capture, drier cake, and cleaner effluent.

Decreased effluent suspended solids result when Novus CE2681E is applied as a settling aid in wastewater clarification and thickening systems. A large, faster settling agglomerate forms producing higher quality effluents. Novus CE2681E is especially suited to primary and secondary solids settling, thickening, and sludge dewatering in the paper industry.

treatment and feeding requirements

Before initial use, Novus CE2681E should be thoroughly agitated with a drum mixer or recirculating pump for 30 to 60 minutes to ensure homogeneity. Remix the polymer for several minutes each day thereafter; bulk system agitators or recirculation pumps should be operated for 30 to 60 minutes daily. Avoid water contamination due to either condensation or water droplets (such as rain) in open containers.

Novus CE2681E can be prepared either by using a continuous emulsion makedown unit or by using a batch system. Stock solutions are prepared as follows: Fill the solution preparation tank approximately 1/3 full of water so that the agitator blade is covered. Begin agitating and slowly add the premixed polymer to the solution tank, either through a disperser unit or directly into the vortex of the tank solution.

Continue to fill the tank with water to achieve a 0.5 to 1 % solution. Continue to mix for an additional 10 to 20 minutes at low speed (350 rpm) to complete activity development. Note that high speed agitation should be avoided since it may lead to degradation of the polymer. Transfer the stock solution to a holding tank to provide for continuous polymer supply, further diluting to 0.2 % before the point of application. Continuous feed is recommended.

Neat Novus CE2681E can be handled with any appropriately sized gear or diaphragm pump suitable for viscosities up to approximately 2500 cps. Type 304 stainless steel, polyethylene, and rigid PVC are satisfactory for tanks, tubing, piping, and pumps. Viton and fluorosilicon type rubbers can be used for pump components and hose linings. Flexible PVC tubing (such as Tygon*), Buna-N and Neoprene rubber can be used for short term installations, but may not be satisfactory in permanent applications. Mild steel and copper alloys should only be used if discoloration of the polymer by corrosion products is tolerable.

Stock solutions should be handled with the same materials of construction. Positive displacement pump, such as gear or piston pumps, can be used to meter the solution to the point of application.

Bulk tank storage should include a desiccant and agitator or recirculation system. Tanks should be installed according to the standard SUEZ tank installation instructions. Consult your SUEZ representative for additional information on bulk feed options.

general properties

Physical properties of this product are shown on the Material Safety Data Sheet, a copy of which is available on request.

packaging information

Novus CE2681E is available in a wide variety of customized containers and delivery methods. For more information please contact your SUEZ representative.

storage and handling

Novus CE2681E should be stored at moderate temperatures (4-32 °C) and should be protected from freezing. This polymer should also be protected from rapid or repeated changes in temperature, which may lead to condensation within the container.

This product should be used within six months to ensure maximum activity.

Spilled polymer is very slippery and precautions should be taken to avoid spills. If a spill occurs, cover the polymer with an inert absorbent material, sweep up the spill, and place in a waste disposal container prior to flushing the area with water. In the wet area, use sand, grit or other suitable material to provide additional traction.

safety precautions

A Material Safety Data Sheet containing detailed information about this product is available on request.

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