



8820 Old Hwy 99 SE, Tumwater, Washington 98501, USA
360-943-6063 800-562-6184 FAX 360-352-4813 www.ch2o.com



POLY-FLOC 106 ANIONIC FLOCCULANT

APPLICATION

POLY-FLOC 106 is a medium charge, high molecular weight anionic polyelectrolyte based on acrylamide and sodium acrylate. **POLY-FLOC 106** is used mainly for flocculation of mineral and hydroxide type solid particles and colloids, preferably for clarification of washing water in the treatment of mining raw materials, such as hard coal, rock salt, sand, gravel and clay. It is also used in the metal producing and processing industries and in the chemical industry.

These applications usually involve the flocculation of very fine to colloidal solid particles suspended in neutral to alkaline slurries, which contain mainly inorganic solids.

Other applications include the treatment of surface and ground water, and all types of wastewater, after preliminary treatment with hydroxide forming substances.

The mode of action of **POLY-FLOC 106** is based essentially on ion exchange between the electrical charges along the polymer chain, which are present in aqueous solution, and the surface charges on the suspended solid particles. The particle surfaces are destabilized, thus bringing about coagulation or flocculation.

The most effective **POLY-FLOC** product should be selected based on performance testing using actual water or wastewater to be clarified. Assistance in properly selecting and applying **POLY-FLOC** flocculants is supplied by your CH₂O Water Treatment Specialist.

SOLUTION PREPARATION & FEEDING

Laboratory: A stock solution of 0.05 to 0.1% concentration is prepared by adding 1 grams of **POLY-FLOC 106** per liter of water while agitating with a mechanical magnetic mixer. One ml of stock solution added to 1,000 ml sample volume provides 1 ppm of **POLY-FLOC 106**. For sludge dewatering, one ml of stock solution added to 100 ml of sample volume provides 10 ppm of **POLY-FLOC 106**. Additional dilutions of the stock solution can be made if required. Stock solutions should be prepared daily.

SOLUTION PREPARATION & FEEDING (Continued)

Plant: For optimum product performance, dilution with clear water to a 0.5% solution or less is recommended.

Daily testing is recommended to maintain proper control. Failure to monitor and maintain treatment levels can cause damage. In addition to monitoring and maintaining treatment levels, it is the customer's responsibility to ensure the product is fit for its intended application.

STORAGE

POLY-FLOC 106 should be stored in a cool, dry area. The product is sensitive to the effect of moisture, which can cause localized lump formation. The shelf life of **POLY-FLOC 106** is at least twelve months in its original form, at least two weeks in a 0.5% solution and at least three days in 0.1% solution.

Spilled product should be swept up immediately, preventing dust development. Do not allow product to become moist and a severe skidding hazard will be generated. Once all visible traces of the product are gone, the area can generally be hosed down without problems. Follow all federal, state, and local regulations in clean up and disposal of spilled product.

SAFETY & HANDLING PROCEDURES

Prevent dust development while handling product. Avoid contact with the eyes. Avoid extended contact with the skin. Rinse the product from skin after handling.

PHYSICAL PROPERTIES

pH of 0.1% Solution 7
Viscosity of 0.1% Solution 30 mPa·s
Pounds per Gallon 700 kg/m³
Physical Appearance White, Granular
Odor None
Effective pH Range 6-10

Seller Warranty

CH₂O brand test reagent refills are available through your sales representative at no charge. Customers are required to confirm product compatibility via a control test for their specific application. CH₂O recommends that you perform regular/daily testing to control chemical levels and cycles of concentration within established limits. Additional tests may be performed at your request. Test reports reflect conditions at the point when the analysis was performed. Results will change over time and with varying operating conditions.

Seller warrants that this product conforms to its chemical description and is reasonably fit for the purpose referred to in the product data sheet. Buyer is responsible to ensure that products and product dosages are appropriate for Buyer's particular application. Seller makes no other warranty or representation of any kind, express or implied, concerning the product, including NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OF THE GOODS FOR ANY OTHER PARTICULAR PURPOSE. No such warranties shall be implied by law and no agent of seller is authorized to alter this warranty in any way except in writing with a specific reference to this warranty. The exclusive remedy against seller shall be a claim for damages not to exceed the purchase price of the product, without regard to whether such a claim is based upon breach of warranty or tort. Jurisdiction for any issues arising from or relating to this product shall be in the courts of the State of Washington and the venue shall be Thurston County. Any controversy or claim arising out of or relating to this contract, or breach thereof, shall be settled by arbitration in accordance with the rules and procedures as stated in RCW 7.06 and shall be binding upon both parties without right to appeal, and judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.

Applies to all products sold by CH₂O, Inc., and is hereby communicated to all of its customers as a condition of sale. Use of CH₂O products is subject to the Standard Terms and Conditions as listed on CH₂O, Inc.'s website at: www.ch2o.com.



VERSION DATE: May 28, 2008 | REVISION DATE: October 14, 2019

