



ATO FLOCs Flocculants

Emulsion Polyacrylamide (PAM), cationic RETENTION AID

ATO FLOCs flocculants are cationic emulsions with a very broad charge and molecular weight range. They are for use in sludge conditioning, wastewater treatment and water clarification processes across the industry spectrum. The chemistry range available ensures there is a product suitable for each individual application.

Advantages

- Very broad cationic charge range
- Economical to use — lower dosage levels
- Improve production and cake solids
- Achieve high solids removal efficiencies
- Easily soluble in water; dissolves rapidly
- Liquid form for easier handling
- Perform well over a wide pH range

Principal Uses

ATO FLOCs flocculants are recommended for the following liquid-solid separation processes:

- Belt filter, screw press and centrifuge dewatering — increased production rate, cake solids and solids capture
- Dissolved air flotation — result in clearer underflows and greater flowrates
- Gravity settling — improves floc formation for faster settling rates, increased sludge compaction and improved water quality
- Coagulant aid — settling aid with inorganic and organic coagulants
- Water clarification — improves influent, process and effluent water quality by reducing suspended solids and turbidity
- Thickening — improved compaction, settling, drainage and effluent quality

The above are the primary applications for these products. These products may be beneficial in any liquid-solid separation process.

Application

Prior to initial use, agitate thoroughly via a low RPM (<475 rpm) drum/ IBC stirrer or a recirculation pump to ensure uniformity. Recommended working solutions are 0.5% concentration, however, stock solutions can be prepared up to 2% via an automated make down unit or on a batch basis. Solutions should be aged 30 minutes for maximum effectiveness. High quality make up water should be used. Secondary dilution water can be added to the stock solution prior to the addition point to improve mixing with the substrate. A ratio of at least 10:1 is recommended. A distributing header or distribution ring is recommended in the treatment stream. Avoid centrifugal pumps for polymer transfer.

Health and Safety

These products can irritate the eyes and skin. Rubber gloves, goggles and protective clothing are recommended for use while handling. They are not acutely toxic by oral and dermal administration to laboratory animals though eye irritation did result. See the Material Safety Data Sheet for complete safety, health and environmental data. Specific cationic emulsion PAMs (see chart) are certified to ANSI/NSF Standard 60 by NSF International.