# PolyFloc* AE1115

## anionic, high molecular weight flocculant

**Water Technologies & Solutions**
**fact sheet**

- Cost-effective liquid
- Reduces floc carryover
- Increases throughput

## description and use

PolyFloc AE1115 is an anionic, low charge density, high molecular weight, polymeric flocculant, which is designed to function in industrial treatment programs as a coagulant aid, or flocculant, in clarification, thickening, and sludge dewatering processes.

PolyFloc AE1115 is a liquid emulsion, providing a cost-effective solution to many solids separation processes in both influent and effluent water treatment applications.

PolyFloc AE1115 produces a fast-settling floc, which reduces carryover when used as a flocculant with inorganic or cationic polymeric coagulants.

It settles lime precipitate in raw water lime/soda softeners, iron oxide suspensions from steel industry wastewaters, and precipitated hydrous metals in finishing water wastes. This product also reduces fines in blast furnace, steel mill scale, and BOP scrubber thickener effluents.

PolyFloc AE1115 provides a clean effluent from automotive oily waste treatment processes and increases settling in chrome/cyanide destruction units and heavy metal separation systems. It can be used to reduce oil in refinery and other industrial wastewaters by improving air flotation unit and API separator efficiencies.

In the steel industry and many other markets, PolyFloc AE1115 is also an excellent sludge dewatering aid producing clean filtrate, high solids capture, and a drier cake.

## treatment and feeding requirements

PolyFloc AE1115 must be dissolved in water before use. The solution may be prepared in batch fashion by slowly adding the pre-mixed polymer to the vortex of an agitated tank. Do not add water to the neat polymer. Recommended initial makedown solution concentration is 0.5% (0.3 to 1%). Low speed (350 rpm) mechanical agitation should continue until complete dissolution is accomplished. Avoid high shear or excessive agitation once the product has been dissolved. It is recommended that diluted solutions be used within 24 hours for maximum activity.

Continuous makedown systems are also available and can produce more reliable results than manual batch makedown. Further dilution of the stock solution to approximately 0.1% enhances polymer performance in most applications. For dewatering applications, diluting to approximately 0.25% may be more practical. Your SUEZ representative can assist you in this and other polymer feeding requirements.

Diluted product may be fed by a pump, an eductor, or by gravity flow to a point where good mixing, but not violent agitation, of the treated water occurs. High speed mixing decreases the activity of the polymer. Pumps used to transfer the solution to the point of application should be positive displacement gear or piston pumps.

Liquid-side components of tanks, pumps, and piping can be constructed of stainless steel or most plastics, with the exception of LD polyethylene and polypropylene. Mild steel is acceptable only in systems where contamination by corrosion products is not a critical problem. Viton and Tygon rubbers are acceptable for pump components and hose linings.

(Viton is a registered trademark of DuPont Dow Elastomers. Tygon is a registered trademark of Saint-Gobain Corporation).

## general properties

Physical properties of PolyFloc AE1115 are shown on the Material Safety Data Sheet, a copy of which is available on request.

## packaging information

PolyFloc AE1115 is a liquid emulsion product, available in a variety of containers. Consult your SUEZ representative for delivery and packaging alternatives.

## storage and handling

Store PolyFloc AE1115 at moderate temperatures of 45 to 100°F (7 to 38°C), and protect from freezing. Bulk containers should be insulated and heat traced (where necessary) if outdoors. Neat polymer should be recirculated or mixed periodically to avoid product separation. Recirculate one container volume per day.

Spilled polymer is very slippery. Small amounts of spilled polymer can be washed down with copious amounts of water. Large spills should be contained and absorbed on inert material, then disposed as solid waste prior to flushing with water.

## safety precautions

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