



TECHNICAL DATA SHEET
POLIFLOC A 872

CHEMICAL-PHYSICAL CHARACTERISTICS

Appearance:	Powder
Color:	White
Smell:	None
Ionic charge:	Medium low anionicity
Viscosity	
(0.1% in distilled water):	150 - 200 mPa s
pH (0.1% in tap water):	approximately 7.0
Effectiveness in pH ranges:	4.0 ÷ 13.0

PRODUCT DESCRIPTION

Medium molecular weight synthetic anionic organic flocculant in powder form based on polyacrylamide.

PRODUCT APPLICATIONS

POLIFLOC A 872 is mainly used in the flocculation of mineral particles and colloids containing hydroxides, in the clarification of washing waters, in the treatment of raw materials derived from the mining industry such as coal, salts, sand and clays.

POLIFLOC A 872 is also used in the metallurgical and engineering industries as well as in the chemical industry. In these cases it is used for the flocculation of very fine or colloidal suspended particles in neutral to alkaline turbidities and as an adjunct to the flocculation of polyvalent ions such as Al^{3+} or Fe^{3+} .

The action mechanism of POLIFLOC A 872 is essentially based on the exchange of charges between the electric charges that are distributed along the polymeric chain in an aqueous solution and those that are found on the surface of the suspended particles. These particles are thus destabilized and tend to coagulate and, consequently, to flocculation.

HOW TO USE THE PRODUCT

POLIFLOC A 872 is used in diluted aqueous solution (0.05 ÷ 0.1%).

For the preparation of a mother solution (about 0.5%) the product is introduced slowly and under stirring into the prepared water. After a dissolution time of about 60 minutes (at a water temperature ≥ 15 °C) the solution is mature and ready for use.

The exact quantities of use can only be determined by laboratory tests or directly in the machine, due to the extreme diversity between the various slurries and muds to be treated. Normally, however, when used as a sedimentation accelerator or as a clarifying agent in static sedimentation plants, a few grams of POLIFLOC A 872 per cubic meter of slurry to be treated are sufficient. In mechanical dehydration of sludge, to obtain optimal machine capacity and purified water substantially free from suspended solids, approximately 100 grams of product per cubic meter of wet sludge are normally required.



PRODUCT STORAGE AND HANDLING

Flocculants such as POLIFLOC A 872 are sensitive to humidity (e.g. condensation or drops of water). In case of contact with water, lumps that are difficult to dissolve may form locally.

The product must therefore be stored in the original closed packaging and protected from humidity.

Safety and accident prevention

In case of spillage or leakage: Warning! Strong danger of slipping in combination with water and/or moisture. Block the road or passage, collect as much of the pure product as possible, then absorb with sand or other absorbent material, repeat this operation if necessary and, finally, rinse only very small residues with a strong jet of water.

Preventive measures: in the case of the solid product, avoid the formation of dust, avoid contact with the eyes and prolonged contact with the skin. After handling or touching the product, wash thoroughly. Based on our experience, POLIFLOC A 872 solutions cannot be defined as corrosive towards the construction materials usually used in containers or for pipes such as plastic materials, plasticized metals or stainless steel.

Stability in case of proper storage

Powder product in the original packaging: about 12 months

0.5% solution in mains water: about 2 weeks

Ready-to-use 0.1% solution in mains water: about 3 days

The product is supplied in 25 kg bags.