

Polyaluminum chloride is a water purification material, an inorganic polymer coagulant, and a polymer with a relatively large molecular weight and a relatively high charge of inorganic polymer produced by the bridge action of hydroxyl ions and the polymerization of polyvalent anions. Pharmacy. In form, it can be divided into two kinds: solid and liquid. The solids are divided into brown, beige, golden yellow and white according to different colors, and the liquid can be represented as colorless, transparent, yellowish, light yellow to yellow-brown.

The polyaluminum chloride having a content of aluminum oxide between 27 and 30 is mostly khaki-yellow solid powder. These types of polyaluminum chlorides have relatively good water solubility, and in the course of dissolution, physicochemical changes such as electrochemical, agglomeration, adsorption, and precipitation eventually lead to $[\text{Al}_2(\text{OH})_3(\text{OH})_3]$ precipitation, thereby achieving the purpose of purification. In the use of polyaluminum chloride, without the need for other additives, floe formation is fast and thick, high activity, rapid precipitation, and a clear effect on high turbidity water purification.

The raw material of the yellow polyaluminum chloride is calcium aluminate powder, hydrochloric acid, bauxite, mainly used for sewage treatment and drinking water treatment, if the raw material for drinking water treatment is aluminum hydroxide powder, hydrochloric acid, and slightly calcium aluminate Powder, plate and frame pressure filtration processes or spray drying processes have strict requirements on heavy metals in the drinking water treatment countries, so both raw materials and production processes are better than tan PACs.

The raw materials for the tan aluminum polyaluminum chloride are calcium aluminate powder, hydrochloric acid, bauxite and iron powder. It is mainly used for sewage treatment because it contains iron powder so the color is tan. The more iron powder is added, the darker it is. If the iron powder exceeds a certain amount, it is sometimes called polyaluminum chloride iron. , has excellent results in the treatment of sewage.

Concentration ratio method:

1. According to the situation of raw water, do a small test before using to obtain the best dose. Small test solution configuration by weight ratio (W / W), generally 2-5% with good. Assembled with 3% solution: said polyaluminum chloride PAC solid 3g, into a 200ml measuring cylinder, add about 50ml of water, to be dissolved and then diluted with water to 100ml scale, shake it.
2. When producing polyaluminum chloride PAC for production, mix and dissolve according to polyaluminum chloride PAC solid:water=1:9 to 1:15 weight ratio. Solutions with a content of alumina less than 1% are prone to hydrolysis and can reduce the effect of use. Concentrations are too high to be easily added evenly.
3. Dosing according to the best dosing amount obtained by small test. For example, if sedimentation tanks are found to be less, if there are large amounts of turbidity, the dosage will be too small. If the sedimentation tank is large and upturned and the remaining turbidity is high, the amount of dosing is too large and adjustments should be made.

Polyaluminium chloride use method:

After the solid product is dissolved in water at 1:3, it is used as a liquid, diluted with 10-30 times of fresh water to a desired concentration. The optimal PH value for the dosing is 3.5-5.0, and the best PH value is added to maximize the benefits of coagulation. The dosage can be determined according to the different turbidity of the raw water, and the best dosage is determined. When the raw water turbidity is 100-500mg/L, the dosage per kiloton is 10-20kg. When the turbidity of the raw water is high, the dosage is appropriately increased, and when the turbidity is low, the dosage can be appropriately reduced.

The dosage of polyaluminum chloride in different water quality:

First, in low turbidity water, the solid polyaluminum chloride product is diluted 1:3 (weight ratio) plus tap water and stirred until completely dissolved.

Second, in the life and production use of sewage, with reference to each ton of sewage before adding about 30g of polyaluminum chloride products. Then add the diluted polyacrylamide product (if the effect is not obvious, please reduce or increase the product dosage as appropriate).□



