

# Xi'an PUTAI Environmental Protection Co., LTD.

Address:: Moka Building 1, Gao Ke Shangdu. High-tech Zone, Xi'an China

TEL:86-18049289982; Email: sales@ywputai.com

## High Purity Nano Grade Aluminum Sol

Aluminum sol, also known as alumina sol, is a colloidal suspension of aluminum oxide ( $Al_2O_3$ ) nanoparticles in a liquid medium. It is characterized by its high stability, transparency, and uniform particle distribution. Aluminum sol is widely used in various industrial applications, including catalysts, coatings, ceramics, and as a binder in refractory materials.



### Feature:

- The colloidal particles are uniformly dispersed, transparent, and stable without agglomeration
- The colloid contains positive charge, which is odorless, non-volatile and non-flammable
- It is viscous, thixotropic, reversible in water
- suspended and absorptive with super high SSA

### Technical Specifications:







Indicator	Index	Actual Value
Appearance	Colorless transparent colloidal liquid	Colorless transparent colloidal liquid
Al content %	≥11	12
Al/Cl	≥1.1	1.2
Fe <sub>2</sub> O <sub>3</sub> %	≤0.2	0.13
PH value	≥3	4
Viscosity, cp (25°C)	≥45mP·s	60mP·s
Density (20°C)	≥1.3g/ml	1.33g/ml

## Packing and storage:

25kg plastic drum or IBC available for bulk order

Storage conditions: Liquid storage in a cool, dry corrosion resistant container, avoid rain, exposure to the sun. Should be associated with alkaline substances,

## Uses:

-  **Binder and Reinforcing Agent:** Used to improve the strength and thermal resistance of ceramic materials.
-  **Filler:** Alumina sol is used as a filler in resins to improve heat resistance and suppress thermal expansion.
-  **Coatings and Paints Additive:** Enhances the adhesion, durability, and corrosion resistance of coatings and paints.
-  **Catalyst Support:** Employed as a carrier for catalysts in petroleum refining, chemical synthesis, and environmental catalysis.
-  **Surface treatment agent:** Alumina sol is used to protect and modify surfaces against mechanical, chemical, and thermal damage.
-  **Fabric Finishing Agent:** Used to enhance the wrinkle resistance and flame retardancy of textiles.

## Note:

The indicators of this product can be adjusted according to customer needs.