



ALUMINUM DIHYDROGEN PHOSPHATE

Technical Data Sheet

Item	Information
Chemical name	Aluminum dihydrogen phosphate; monoaluminum phosphate
Formula	$Al(H_2PO_4)_3$
CAS No.	13530-50-2
Product type	High-temperature material; binder
Physical properties	Colorless viscous transparent liquid or hygroscopic white powder. Cures at room temperature and is affected by temperature. Liquid and solid products have strong chemical bonding force, high-temperature resistance, vibration resistance, spalling resistance and high-temperature gas erosion resistance, with good infrared absorption and insulation properties.

Applications

1. Good thermal shock stability, wear resistance and high-temperature toughness, with good mechanical strength at low and high temperatures. It has been widely used by refractory material manufacturers and users for many years.
2. Used for refractory spray coatings, refractory clay, castables and binders. Mainly used in the production of corundum bricks for the refractory industry.
3. Used as a binder for refractory materials, mainly in the electrical industry, high-temperature furnaces, heat-treatment resistance furnaces and electrical insulation.
4. Used in petroleum, chemical, shipbuilding and aerospace technology. It can also be used as a bonding component for inorganic and organic coatings.

ALUMINUM DIHYDROGEN PHOSPHATE TECHNICAL PARAMETERS

Check item	Liquid	Powder
Appearance	Colorless liquid	White powder
P ₂ O ₅ (%)	40-43	80-85
Al ₂ O ₃ (%)	--	--
pH value	1.5-2.5	2-4
Density >=	1.47	--