

## NANO SILICA H-620

### Product description:

Special functional nano silica is a type of ultra-fine and active silica particle, it is an emerging and important silicon based inorganic functional powder material. Nano silica, also known as white carbon black, it is a powder material with a certain spatial structure composed of particles with a primary particle size of 8-20nm. Due to the non-toxic and harmless nature of nano silica, as well as its good bio compatibility, and its surface contains a large amount of active hydroxyl groups, therefore, it is widely used as a modification additive for polymers, such as reinforcing agents for rubber and plastic products, thickening and matting agents for coatings, UV resistant agents in cosmetics, thickening and friction agents in toothpaste, ink modifiers, etc. It can also be used as a carrier and increase its flowability in veterinary medicine, pesticides, and pharmaceuticals. In composite products such as ceramics, the hardness, wear resistance, toughness, smoothness, and cold and hot fatigue properties can be improved. It is a modified additive for various materials, known as industrial "gourmet powder".

Technical Parameter		
Inspection	Inspection Standard	Index value
Heating reduction (%)	HG/T 3065-2008	≤ 7.0
Loss on ignition (%)	HG/T 3066-2008	≤ 7.0
Silica content (%)	HG/T 3062-2008	≥ 98
DBP absorption value (cm <sup>3</sup> /g)	HG/T 3072-2008	2.3-3.0
Total specific surface area (m <sup>2</sup> /g)	HG/T 10722-2014	150-200
Median particle size (μm)	HG/T 32698-2016	9-13
pH value	HG/T 3067-2008	6.0-7.5
Conductivity (μS/cm)	Conductivity meter	≤ 200
Total iron content (mg/kg)	O-phenanthroline Spectrophotometry	≤ 150

### Recommended Application:

- Rubber industry
- Paints and coatings
- Medical and food areas
- Paper industry
- Environmental engineering
- Thermal insulation material

### Key characteristics:

- Particle morphology
- The appropriate particle size distribution
- Specific surface area
- Stability