

Silicon Dioxide Nanoparticles SOP13

Description:

Silicon dioxide, also known as silica, is an oxide of silicon with the chemical formula SiO_2 , most commonly found in nature as quartz. Silica compounds can be divided into two groups, crystalline (or c-silica) and amorphous silica (a-silica or non-crystalline silica). a-Silica chemical structures are more randomly linked when compared to c-silica. Silica is odorless solid composed of silicon and oxygen atoms. Amorphous and dielectric properties of SiO_2 are suitable to be used as microwave absorber electric for anti-radar.

Characterization	
CAS	7631-86-9
Stock No.	SOP1301
Molecular formula	SiO_2
Molecular weight (g/mol)	60.08
Form	Powder
Color	White
Morphology	Semi-spherical
Crystal structure	Amorphous
Size range (nm)	40-80
Total impurity (%)	N/A
Density (g/cm ³)	2.5
Solubility	Insoluble

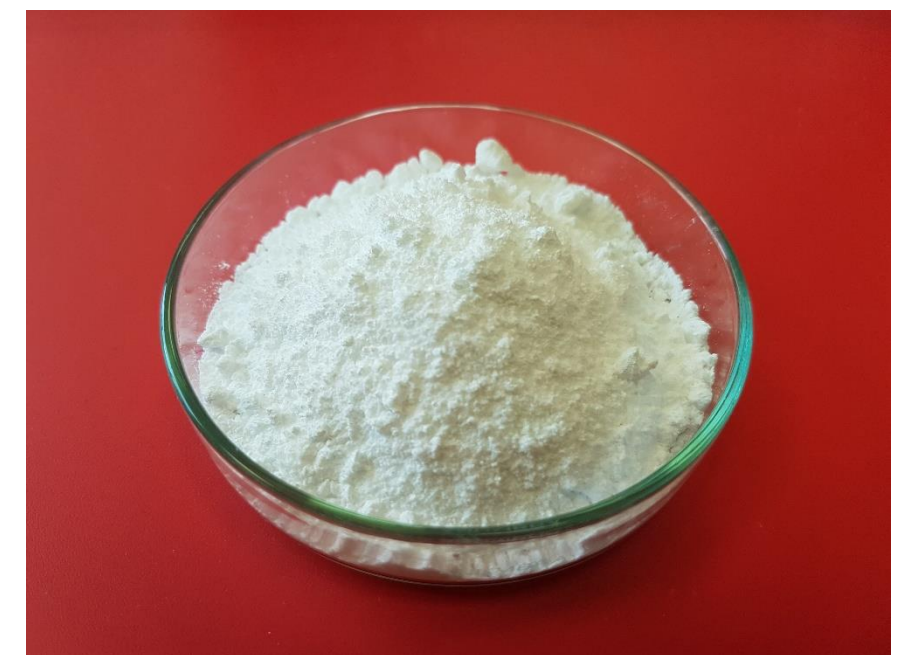


Image of silicon dioxide nanopowder (SOP1301)

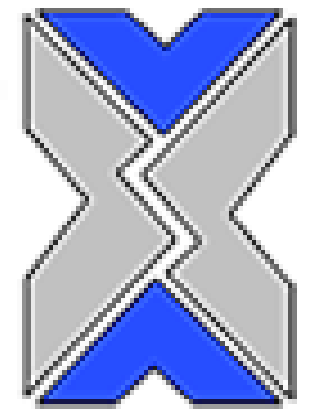
Note: product specifications are subject to amendment and may change over time.

Applications (but not limited to the following):

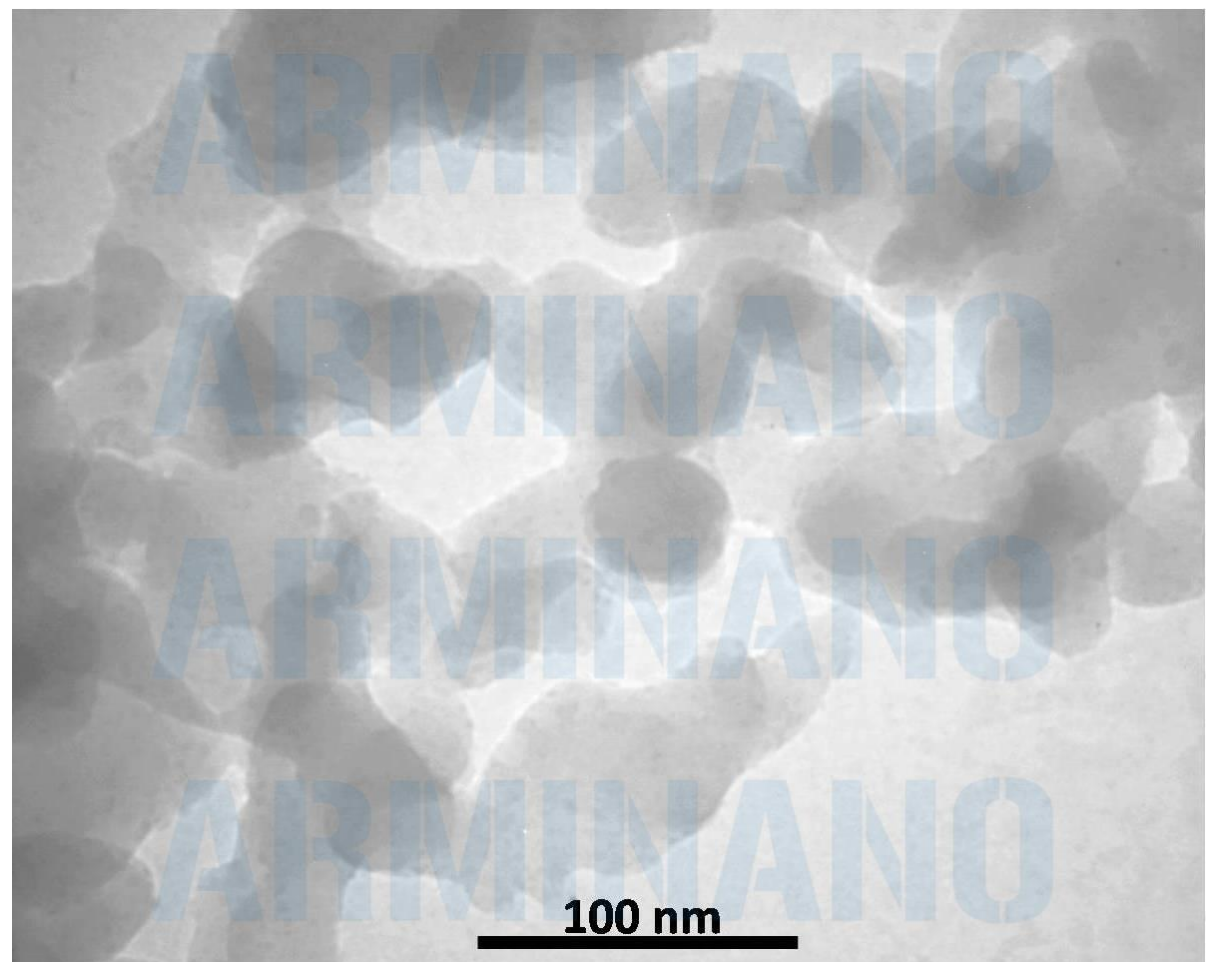
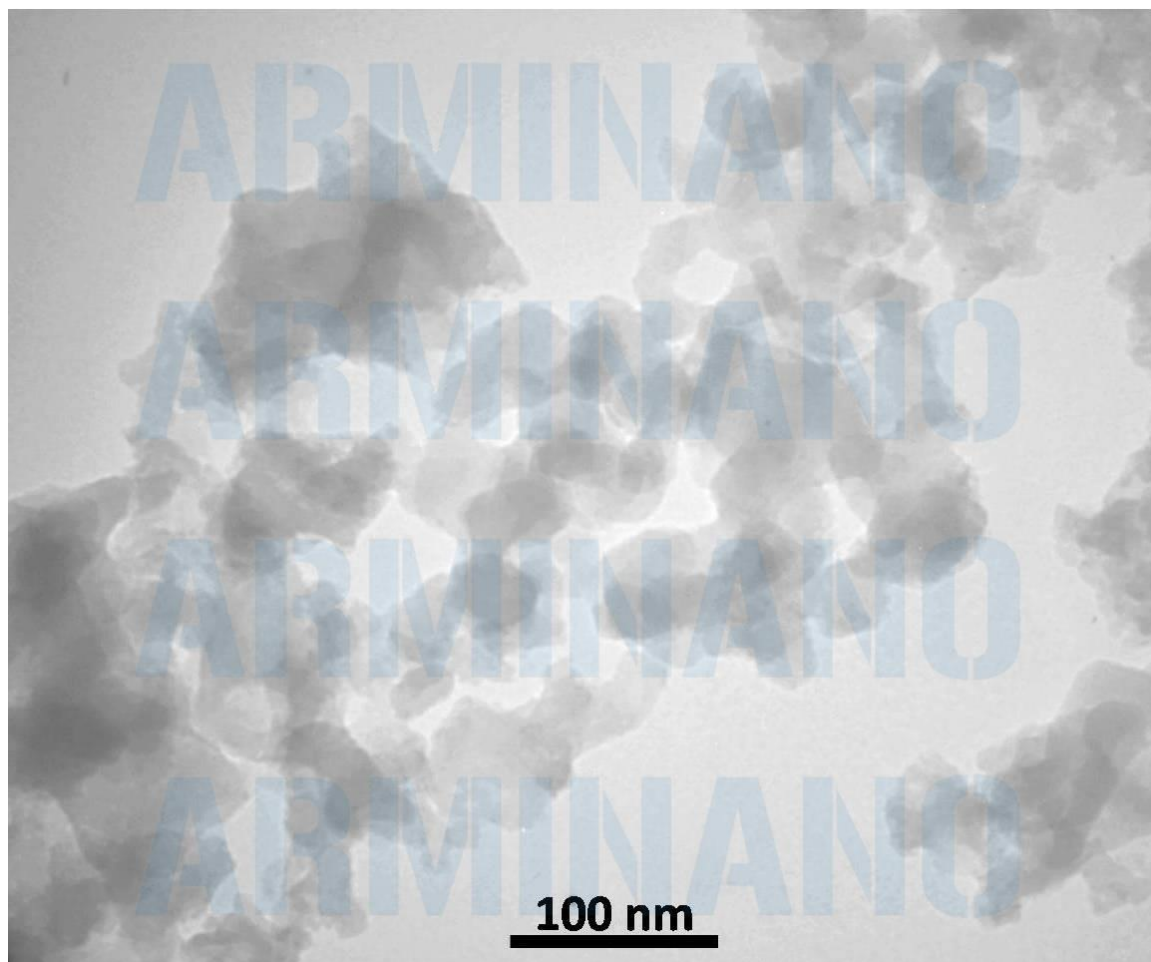
As filler in rubber and plastics, drying powder, substrate for catalysts, anticorrosion agent, electronic devices, insulator, food additives, pharmaceutical.

Safety:

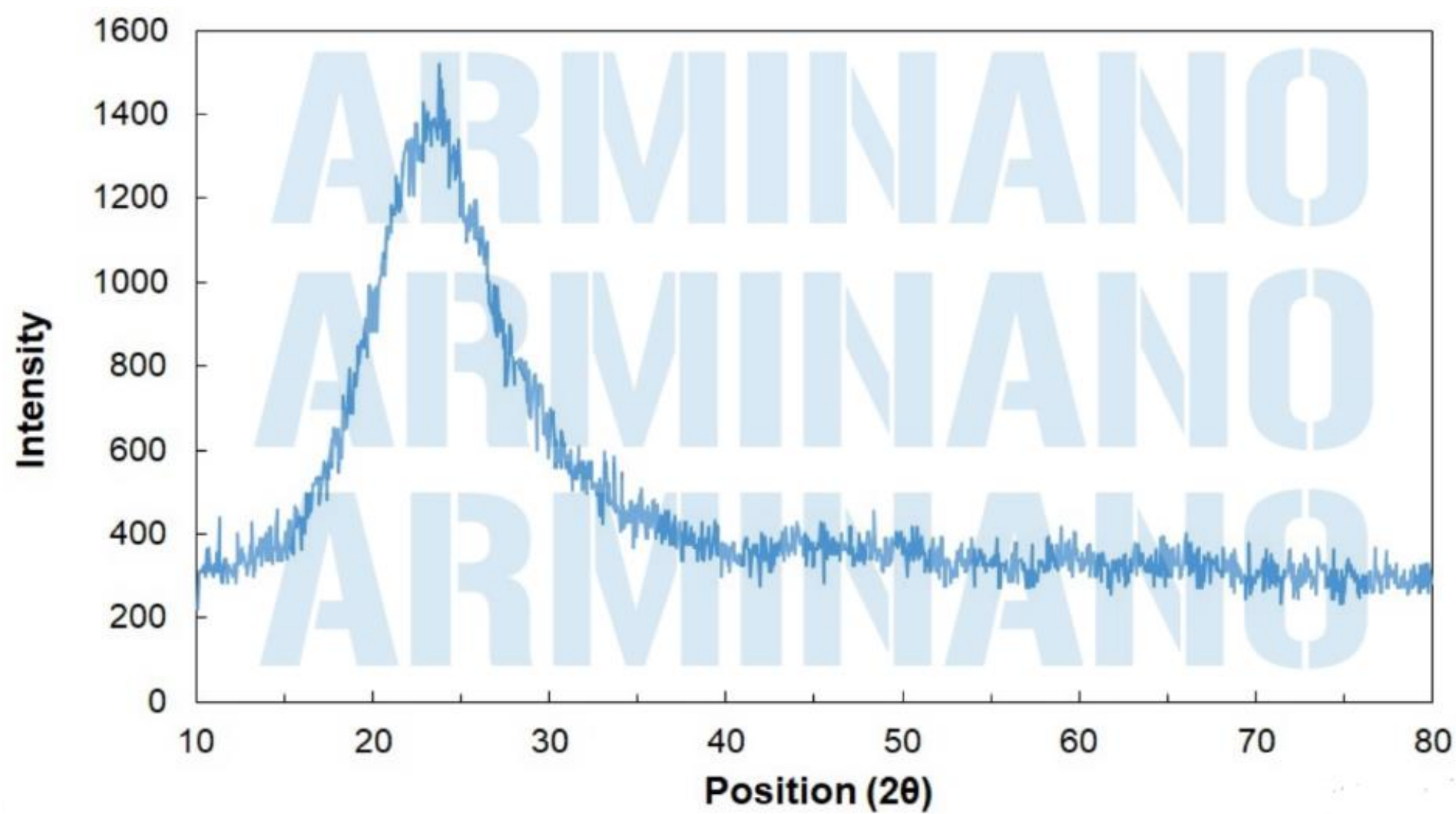
Avoid breathing dust.
Always use protective gloves and safety glasses.
Wash with soap and water after exposure.
Refer to MSDS prior to handling this material.



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TEM images of SOP1301



XRD pattern of SOP1301

Storage:

- Keep it in cool dry place.
- Avoid direct sunlight.
- Do not freeze.
- To disperse nanoparticles sonication could be used.

Shelf life:

When stored as specified the product is stable for at least 6 months.

