SHT GF-Silica

Graphene Flakes Coated with Silica

DESCRIPTION

SHT GF-Silica is a highly-separated silica coated graphene hybrid material, which possesses large aspect ratio, mesoporous silica structure, high surface area, and high monodispersion capability. Such unique features not only facilitate its separation in all kinds of solvents, but also perform as the host for diffusion of guest ions or molecules in many diffusion-controlled systems. The SHT GF-Silica or solutions can be widely applied in the field of composite materials to improve mechanical property by reinforcing the microstructure and also for applications in the area of catalyst carrier.

FEATURES AND BENEFITS

- Large aspect ratio
- Functionalized graphene
- Mesoporous silica structure
- high monodispersion capability

TYPICAL APPLICATIONS

- Catalyst
- Composite
- Capacitor
- Energy storage

ORDERABLE AMOUNT

SHT GF-Silica Powder form: 0.25-100g.
SHT GF-Silica Powder in solution: 50-1000 ml.

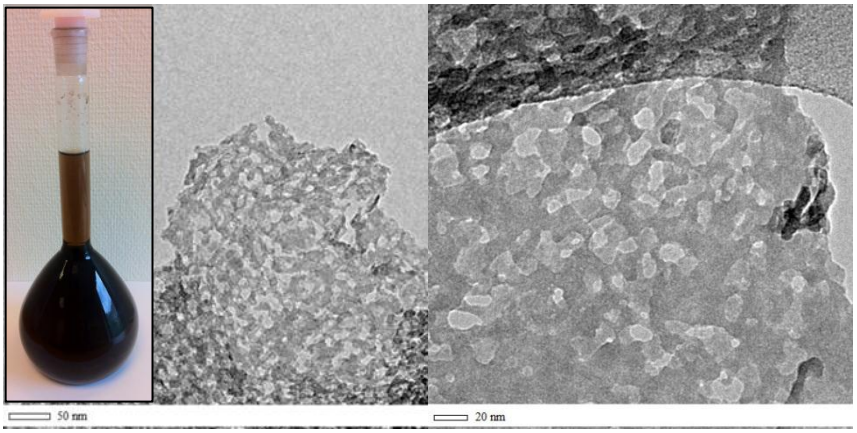

Figure 1 TEM images of SHT GF-Silica with different magnifications. The graphene has an average size of 5~10 μm. After surface coating, a silica layer is deposited on the surface of graphene to form a hybrid material.

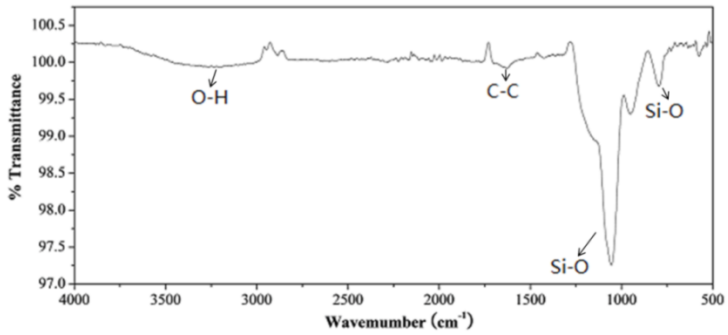

Figure 2 FTIR spectra of SHT GF-Silica. The position and the shape of the main Si-O vibrational band at 1085 cm^{-1} on FTIR spectra shows a stoichiometric silicon dioxide structure.

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