



OH Functionalized Fullerene C₆₀ PRODUCT DATA SHEET

OH Functionalized Fullerene C₆₀

Description

Fullerenes are hollow molecules composed entirely of carbon in the shape of a sphere, ellipsoid, column, or tube. Fullerenes are poorly soluble in most solvents and are usually solubilized with aromatic solvents such as toluene, chlorobenzene, or non-aromatic solvents such as carbon disulfide. Pure fullerene solution is usually purple, the concentration is dark purple. Fullerenes are structurally similar to graphite, which consists of layers of graphene made of six-membered rings, whereas fullerenes contain not only six-membered rings but also five-membered rings, and occasionally seven-membered rings. According to the total number of carbon atoms, fullerenes can be divided into C₂₀, C₆₀, C₇₀, C₇₆, and C₈₀. Among them, C₆₀ is highly symmetrical cage structure enables it to have high stability and is therefore the most widely studied in the fullerene family. Fullerenes are one of the most important carbon-containing nanomaterials in recent years because of their unique zero-dimensional structure. At the same time, fullerenes have special optical properties, conductance and chemical properties, so fullerenes and their derivatives have been widely used in electricity, light, magnetism, materials science and so on. The starting material of OH Functionalized Fullerene C₆₀ is >99% purity C₆₀ fullerenes. C₆₀ bearing over 40 hydroxyl groups that have higher water solubility (> 50 mg/mL). These exist as monodisperse nanoparticles in water, and have a valiant polishing effect. They exhibit superior antioxidant and anti-inflammatory properties.

Abvigen offers high quality OH functionalized fullerene C₆₀. The product has high repeatability between batches, which can meet the needs of various customers for personalized materials such as research and development, testing and production.

For custom sizes, formulations or bulk quantities please contact our customer service department.

Website: www.abvigen.com **Phone:** +1 929-202-3014 **Email:** info@abvigenus.com

Characteristics

Type: OH Functionalized Fullerene C₆₀

Size: 0.1 g

Water: Soluble can reach > 5 g/100 mL



DMSO: Slightly soluble

Methanol: Slightly soluble

Storage temp. 2-8°C

Color: Dry powder form: Dark brown

Liquid form: From light yellow to dark brown based on concentration

Advantages

High stability

Higher water solubility

Valiant polishing effect

Superior antioxidant and anti-inflammatory properties

Applications

Polyhydroxylated fullerene (Fullerenols Application: Polyhydroxylated fullerene (Fullerenols) may be used as: rubber/film material modifiers; additives; high energy; rubber/film material modifiers; additives; Phase-transfer agent; Anti-bacterial agent; Presenting and treating agent for inflammatory bowel disease; Cosmetics; Drug delivery... Fullerene can strongly absorb free radicals, inhibit chemical toxicity, anti-radiation, anti-UV damage, heavy metal cell damage protection, anti-cell oxidation, anti-bacterial infection, free radicals can protect cells from a variety of damage. Can be widely used in nuclear magnetic resonance imaging, anti-HIV drugs, anti-cancer drugs, chemotherapy drugs, cosmetics additives and scientific research and many other areas...

Ordering Information

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