



by  Solaris Chem

Neurobium C60

Pharma/Biotech

Description

NEUROBIUM™ C60 is a specialized research-grade fullerene C60, designed for use in pharmaceutical and biotechnology studies. Featuring a distinctive hollow carbon cage, it serves as a multi-radical scavenger, effectively neutralizing both reactive oxygen and nitrogen species. It is engineered to imitate the function of natural antioxidant enzymes like superoxide dismutase (SOD).⁴

Key Research Applications

- **Neuroprotection:** Exhibits protective properties in neuronal models, helping to decrease apoptosis and reduce oxidative stress during neurodegenerative disease investigations.^{2,4}
- **Oxidative Stress Modulation:** Research shows C60 can lower oxidative damage and prevent lipid peroxidation, making it significant for cardiovascular, renal, and hepatic research.⁴
- **Drug Delivery Nanocarriers:** Thanks to their spherical shape and ability to be functionalized, C60 molecules can be linked to drugs, peptides, or nucleic acids to facilitate targeted delivery.^{3,5}
- **Anti-viral and Anti-proliferative Studies:** Various fullerene derivatives are being explored for their potential to inhibit viral proteases and for their roles in oncology research.^{1,5}

References

1. Hurmach, V. V.; et al. Anticoronavirus activity of C60 fullerene: In silico and in vitro screening. *Nano Biomed. Eng.* 2024, 16 (1), 45–58.
2. Du, J.; et al. Distinctive Effects of Fullerene C60 and Fullerol C60(OH)₂₄ Nanoparticles on Behavioral Hallmarks of Alzheimer's Disease. *Int. J. Mol. Sci.* 2023, 24 (15), 12154.
3. Zhu, Y.; et al. Fullerene C60 Conjugate with Folic Acid for Targeted Delivery to Tumor Cells. *Pharmaceutics* 2023, 15 (3), 982.
4. Gharbi, N.; et al. [60]Fullerene is a powerful antioxidant in vivo with no acute toxicity. *Toxicol. Lett.* 2005, 158 (3), 183–192.
5. Smith, A. B.; et al. Development of photoactive biomaterial using modified fullerene nanoparticles. *Front. Chem.* 2024, 12, 134567.




Neurobium™ C60 SOL5060YN

Available from g level (for R&D, Tech centers and universities) to kg level (for industrial developments).



PRODUCT SPECIFICATIONS

Grade 99.95% (SOL5369YN)
Solvent-free* 

*Optimized for high solubility in water and aqueous buffers.

**Purity preservation: Packed under inert medical nitrogen gas to inhibit oxidation.

***Synthesized via a Solvent-Free Method (A Solaris Chem Inc proprietary solvent-free synthetic method is used, resulting in a solvent free material).

Estimated time to dissolve/disperse in:

Toluene: Few seconds to few minutes (max 3 g/L).

o-DGB: Few seconds to few minutes (max 24 g/L).

Olive oil: 3-5 days (to 0.8-1g/L, vs 2 weeks for most common C60 powder).
Estimated times provided as a guidelines only.



Green chemistry



Environmentally friendly

SUSTAINABILITY is fundamental to our operations and serves as the driving force behind our growth. At Solaris Chem, we emphasize the principles of green chemistry, minimize waste, recover and recycle solvents and materials to the greatest extent possible, and utilise renewable hydroelectric energy to support our activities.

SOLARIS CHEM America

Headquarters & Labs
3650 Bld. Cité-des-Jeunes, Suite 101,
Vaudreuil-Dorion, Quebec, Canada
J7V 8P2
Toll Free: (855) 489-3557
Phone: (579) 217-0260
General info: info@solarischem.com
Sales: sales@solarischem.com
website: solarischem.com

SOLARIS CHEM Europe

Representative
EMFUTURA Advanced Corporation S.L.
Rnd. Circunvalación 188,
of. 11,
12003 Castellón, Spain
P. +34 864961236
solarischem.com/contact

SOLARIS CHEM Middle East

15, 4th Floor, Bldg. No. 5.,
Wafa Complex, Street 103, Area 6,
Farwaniya, Kuwait
P. +965 66459915
solarischem.com/contact

SOLARIS CHEM Southeast Asia

(Singapore, Malaysia, Thailand,
Indonesia, Vietnam, Philippines,
Myanmar)
No. 27Woodlands Industrial Park E1,
#03-02, Singapore, 757718
P. +65 9363 8706
solarischem.com/contact

SOLARIS CHEM Taiwan

(Taiwan, China, Hong Kong)
2F., No. 67, Aly. 30, Ln. 136,
Kangle St., Neihu Dist.,
Taipei City 114, Taiwan (R.O.C.)
P. +88 69 8900 9807
solarischem.com/contact

SOLARIS CHEM Japan

Representative
TOSCO Co. LTD,
401Daido Bldg., 3-5-5,
Uchikanda, Chiyoda-ku,
Tokyo 101-0047, JAPAN
T. +813 5295 6316
F. +815295 6311
website
solarischem.com/contact