



Lumerium C60

Cosmetics

Description

LUMERIUM C60 is a high-purity fullerene C60 ingredient designed specifically for **cosmetic and dermatological applications**. Known as a powerful “radical sponge”, fullerene C60 neutralizes free radicals more effectively than vitamins C and E, making it a unique anti-aging and skin-protective active.

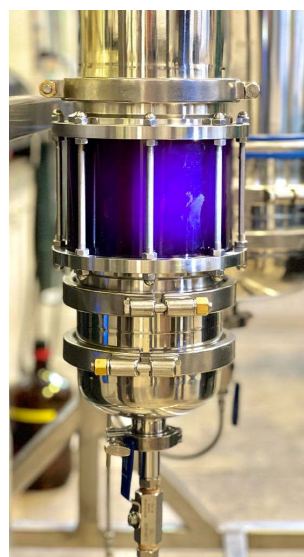
LUMERIUM C60 Premium fullerene C60 for advanced cosmetic formulations. Clinically studied as a potent antioxidant and anti-aging active, **LUMERIUM C60** protects skin from oxidative stress, supports collagen, reduces wrinkles, and helps brighten the complexion. Available in ultra-high purity solvent-free and sublimed grades for reliable performance in skincare R&D.

Key Applications for Cosmetics:

- **Potent antioxidant capacity:** Protects skin from UV and pollution-induced oxidative stress.
- **Anti-aging effects:** Clinically demonstrated wrinkle reduction and anti-aging effects [Ref. 1].
- **Skin elasticity:** Helps preserve collagen and skin elasticity [Ref. 4].
- **Skin brightening:** Contributes to skin brightening by reducing melanin production [Ref. 5].
- **Stable in formulations:** Synergistic with vitamins and oils.

References

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- [2] “Permeation of skin with (C60) fullerene dispersions”,
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- [3] “Anti-Inflammatory and Antioxidant Effects of Liposoluble Fullerene in Cosmetic Application”,
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- [4] “Influence of hyper-harmonized fullerene water complex on collagen molecules and biophysical properties of the skin”,
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Available from **g level** (for R&D, Tech centers and universities) to **kg level** (for industrial developments).



Lumerium C60

SOL5060YL

Grade 99.95% (SOL5060YL)
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).

Time to dissolve/disperse in:

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

o-DCB:
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 at the core of what we do and our engine for growth, which is why we prioritize the use of GREEN CHEMISTRY, avoid wastes, recover and recycle solvents and materials as much as possible and use renewable hydro-electrical energy to power our operations.

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Lumerium Hydroxy C60

Cosmetics Water soluble



Description

LUMERIUM HYDROXY C60 is a high-purity, water-soluble fullerene derivative (fullerenol C60(OH)_x) designed specifically for **cosmetic and dermatological applications**. Unlike pristine fullerene, **LUMERIUM HYDROXY C60** disperses easily in aqueous systems such as serums, gels, and lotions, enabling broad formulation possibilities. Known as a potent “radical sponge”, fullerenol neutralizes multiple reactive oxygen species simultaneously, making it a unique anti-aging and skin-protective active.

LUMERIUM HYDROXY C60 delivers powerful antioxidant protection in serums, gels, and lotions — helping to reduce oxidative stress, support collagen integrity, and enhance skin vitality.

Key Applications for Cosmetics:

- **Potent antioxidant capacity:** Quenches free radicals in aqueous environments, protecting skin from oxidative stress.
- **Clinically studied protective effects** on cellular systems, reducing oxidative damage [Ref. 1].
- **Supports skin vitality and elasticity:** by modulating collagen integrity [Ref. 3].
- **Hydrophilic, formulation-friendly:** Ideal for serums, toners, and water-based emulsions.
- **Synergistic** with vitamins and other hydrophilic actives.

References

[1] “Study of C60 fullerene as a powerful antioxidant in aqueous systems”,
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Author(s): Miljkovic, S. et al. - J. Cosmet. Dermatol. (2020).

[5] “Anti-Inflammatory and Antioxidant Effects of Fullerenol in topical application”,
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Author(s): Antunes-Ricardo, M. et al. - LACCEI (2024).



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