Lumerium Hydroxy C60

TECHNICAL DATA SHEET [**TDS**]

SECTION 1

Identifiers and Synonyms

Product Name	Lumerium Hydroxy C60
Reference	SOL5369-YL
Chemical Name	Fullerenol (hydroxylated C_{60}), polyhydroxylated fullerene
CAS Number	N/A
Synonyms	Fullerenol C60
Molecular Formula	C60(OH)n
Molecular Weight	It depends on how many hydroxyl groups are attachen to the nucleus
Appearance	Yellow to light brown powder

Product

Hydroxy

SECTION 2

Optoelectronic Properties

Property	Value
HOMO (n ≈ 20–24)	–6.0 to –5.8 eV
LUMO (n ≈ 20–24)	–3.6 to –3.4 eV
Absorption λmax	Not available (N/A)
Emission λmax	Not available (N/A)

SECTION 3

Thermal and Physical Properties

Property	Value
Melting Point	N/A
Color	Brown to dark yellow
Texture	Powder
Solubility	Water, >50 mg/ml – soluble

SECTION 4

Storage & Handling

- Temperature: Store at room temperature (15–25 °C) in a dry, cool place.
- Container: Keep in airtight, light-resistant containers (amber glass vials or sealed polymer bottles).
- Atmosphere: Preferably under inert gas (argon or nitrogen) for long-term stability.
- Moisture protection: Desiccator storage is recommended — fullerenol readily absorbs atmospheric moisture).
- Nitrile gloves
- Protective eyewear (EN 166 compliant)

SECTION 5

Applications

- Biomedical and Pharmaceutical Research: Antioxidant therapy, Neuroprotection, Drug delivery systems.
- Cosmetics and Personal Care: Anti-aging, UV Protection, Skin brightening.
- Environmental Applications: Water Purification, Antimicrobial Coatings.
- Material Science & Nanotechnology: Polymer nanocomposites, Electrochemical devices.

SECTION 6

Safety & Transport

- **Hazard Classification:** See SDS for details.
- **Transport:** Non-regulated; pack in sealed, labeled containers.
- **Disposal:** Follow local regulations.