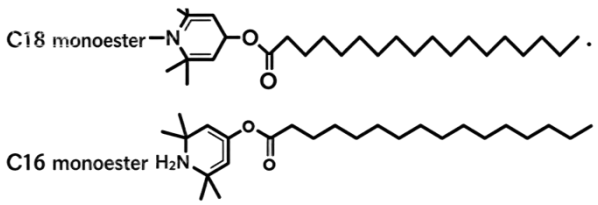
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Light stabilizer UV-3853

Stearate-based small-molecule hindered amines exhibit exceptional compatibility with long alkyl side chains, demonstrate low precipitation tendencies and resistance to frosting, and ensure excellent dispersion in polyolefin systems without white spots; they feature low volatility and minimal heat loss, provide both photostabilization and auxiliary antioxidant properties, offer long-lasting gloss retention, and effectively resist powdering and discoloration; these compounds are compatible with PP/PE thin films, flat filaments, TPO, ABS, POM, nylon, and other rubber-plastic products; when formulated with high-performance HALS or benzotriazole UV absorbers, they can significantly enhance the synergistic weathering resistance of outdoor applications.

1. Product physicochemical properties

1.1 Product basic information

Project	Content
Chemical name	C12-21 fatty acids, 2,2,6,6-tetramethyl-4-piperidinyl esters
Cas number	167078-06-0
Molecular structure	
Formula weight	C18: 423.72; C16: 395.67

1.2 Technical parameter

Test item	Parameter
Appearance	White, pale yellow waxy solid
Melting point ℃	≥28
Saponification value (mg KOH/g)	128-137
Transmittance,% at 425 nm	≥90.0
Transmittance,% at 500 nm	≥95.0
Ash %	≤0.1
APHA	≤50
Drying reduction %	≤0.5
Content %	≥98

1.3 TGA thermogravimetric data

Temperature	Thermal degradation ratio
229℃	1%
260℃	5%
277℃	10%

1.4 Solubility (20 °C, g/100 mL solvent)

Solvent	Solubility
Benzene	36.04g
Methylbenzene	21.68g

Solvent	Solubility
Acetone	1.58g
Ethyl acetate	3.59g
Alcohol	29.19g
N-hexane	32.31g
Pure water	<0.01g

2. Operation and safety

1. This product is a general-purpose plastic additive; it can be handled in accordance with standard chemical raw material operating procedures;

2. Avoid generating large amounts of dust; ensure proper ventilation in the workshop and keep it away from open flames and high-temperature heat sources;

3. Personal protection: Wear a dust-proof mask and nitrile protective gloves;

4. For complete information on first aid, leakage, storage, and transportation, and hazards, please refer to the accompanying safety data sheet (SDS).

3. Storage and transportation

1. Store in a cool, dry, and well-ventilated warehouse; avoid direct sunlight, exposure to rain, or moisture.

2. Store separately from strong oxidizing agents, strong acids, and strong alkalis;

3. The original factory-sealed product has a shelf life of 24 months at room temperature; once opened, use it promptly and avoid exposure to moisture.