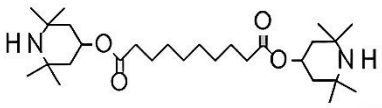
Document Number: YL-HALS-TDS-01 Issue Date: 2026/07/03

Light stabilizer UV-770

A small-molecule hindered amine light stabilizer with high radical scavenging efficiency and excellent light-stabilizing performance, demonstrating good compatibility with polyolefins. It features a moderate molecular weight, superior dispersibility, and ensures uniform dispersion without white spots during processing, while providing additional protection against thermal and oxidative aging. Suitable for polyolefin products such as films, injection-molded items, and fibers; when formulated with UV absorbers, it enhances outdoor weather resistance, anti-powdering properties, and fading prevention.

1. Product physicochemical properties

1.1 Product basic information

Project	Content
Chemical name	Bis(2,2,6,6-tetramethyl-4- piperidyl) sebacate
CAS number	52829-07-9
Molecular structure	
Formula weight	480.72

1.2 Technical parameter

Test item	Parameter
Surface	White powder or granules

Test item	Parameter
Melting range ℃	82-85
Ash content %	≤0.1
Transmittance,% at 425 nm	≥98.5
Transmittance,% at 500 nm	≥99.0
Dry weight reduction %	≤0.5
Content %	≥99.0
2,2,6,6-tetramethyl-4-piperidinol,%	≤0.30

1.3 TGA thermogravimetric data

Temperature	Thermal weight loss ratio
202℃	1%
222℃	5%
243℃	10%

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

Solvent	Solubility
Dichloromethane	74.26g
Chloroform	67.01g
Methylbenzene	43.30g

Solvent	Solubility
Acetone	14.97g
Ethyl acetate	21.65g
Methanol	30.10g
N-hexane	3.295g
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. Minimize dust generation; ensure proper ventilation in the workshop and keep it away from open flames and high-temperature 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 hazard details, please refer to the accompanying SDS (Safety Data Sheet).

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 bases;

3. The original factory-sealed product has a shelf life of 24 months at room temperature; once opened, it should be used as soon as possible to prevent moisture absorption and clumping.