



Entrada 200 Unit 203 tel.: 31 20 4166638 1114 AA Amsterdam-Duivendrecht fax: 31 20 5241356 The Netherlands email: sales@hunan-chem.com

www.hunan-chem.com

Trade registration nr. 50769421 Chamber of Commerce Amsterdam

# **Technical Data Sheet**

**Product name:** UV-770

**Chemical name:** Bis(2,2,6,6-tetramethyl-4-piperidine)sebacate

 Synonym:
 Tinuvin@770

 CAS No:
 52829-07-9 

 EC No:
 258-207-9 

 Chemical formula:
  $C_{22}H_{29}N_3O$  

 Formula weight:
 481

**Chemical Structure:** 

**Quality norm:** technical grade

Specification:

Appearance: White with light yellow powder or pellet

Assay: 99.0% min. Melting point:  $81.0 \sim 85.0 \,^{\circ}\text{C}$  Volatile matter: 0.5% max. Ash content: 0.1% max.

Light transmittance:

425 (nm): 98.0% min. 500 (nm): 99.0% min.

### **Characterization:**

UV- 770 is a hindered amine light stabilizer (HALS) for applications demanding particularly high light stability. It provides excellent light stability for thick sections but can also be used for articles with a high surface area such as films and tapes.

## Application:

UV- 770 is recommended to be used in polypropylene, impact modified PP (TPO), EPDM, polystyrene, impact poystyrene, ABS, SAN, ASA and polyurethanes and is also effective in polyamides and polyacetals.

#### Features:

UV-770 is a low molecular weight hindered amine light stabilizer that provides excellent light stability for thick sections and films in the recommended substrates. Benefit of using UV-770 is

the high light-stabilizing performance, particularly in PP thick sections. It has broad compatibility and can be easily dispersed.

Compared to conventional UV-absorbers, the effectiveness of UV-770 is less dependent on the polymer's thickness. For this reason the use of UV-770 also provides good light stability in articles with higher specific surface, e.g. films and tapes.

Combined with other HALS UV-770 is part of other synergistic blends, e.g. UV-791.

#### **Guidelines:**

The recommended concentrations range between 0.1% and 0.5%, depending on the substrate, processing conditions and application. The optimum level is substrate and application specific. Extensive performance data of UV-770 in various substrates and for various applications is available upon request.

## **Physical Properties:**

Melting Range	81-85 °C
Flashpoint	> 150 °C DIN 51584
Specific Gravity (20 °C)	1.05 g/cm3
Vapor Pressure (20 °C)	1.3 E-8 Pa
Bulk density	470 - 510 g/l

Solubility (20 °C)	% w/w
Acetone	19
Chloroform	45
Ethanol -	
Ethyl acetate	24
n-Hexane	5
Methanol	38
Methylene Chloride	56
Toluene	-
Water	< 0.01

Volatility	Pure substance; TGA, heating rate at 20 °C/min in air
Weight Loss (%)	Temperature °C
0.7	150
0.7	175
1.0	200
2.1	225
7.2	250
19.8	275

### **Handling and Safety:**

In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Avoid continuous or repetitive breathing of dust. Use only with adequate ventilation. Avoid contact with eyes. Avoid release to the environment. Avoid dust formation and ignition sources.

For more detailed information please refer to the material safety data sheet.

## Registration:

UV-770 is listed on the following Inventories:

Australia	AICS
Canada	DSL

### TDS Hunan Chemical BV

China Draft Inventory

Europe EINECS
Japan ENCS
Korea ECL
Philippines PICS
USA TSCA

### Packing:

In 25kg net pp cartons on pallets or 20kg bags, 500kg (carton) per pallet or 500kg (bags) per pallet or as required or 110pound fibre drum on pallet with shrink film. Palletizing is wrapped and film shrunk

Loading capacity: 10mt per 20'FCL.

#### **IMPORTANT:**

The following supersedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled or lab work and must be confirmed by Buyer by testing for the intended conditions of use. The product(s) has (have) not been tested for, and is (are) therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.

Please note that products may differ from country to country. If you have any queries, please kindly contact us.