®TINUVIN 770

Low Molecular Weight Hindered Amine Light Stabilizer (HALS)

Characterization

®TINUVIN 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 surfacearea such as films and tapes.

Chemical Name

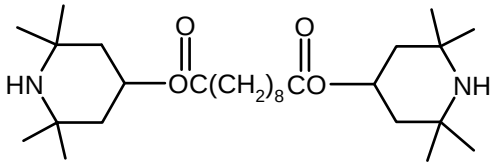
Bis (2,2,6,6,-tetramethyl-4-piperidyl) sebaceate

CAS Number

52829-07-9

Structure

®TINUVIN 770



Molecular weight

481

Applications

®TINUVIN 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/ Benefits

®TINUVIN 770 is a low molecular weight hindered amine light stabilizer that provides excellent light stability for thick sections and films in the recommended substrates. Benefits of using ®TINUVIN 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 ®TINUVIN 770 is less dependent on the polymer's thickness. For this reason the use of ®TINUVIN 770 also provides good light stability in articles with higher specific surface, e.g. films and tapes.
Combined with other HALS ®TINUVIN 770 is part of other synergistic blends, e.g. ®TINUVIN 791

Product Forms

Code:	Appearance:
®TINUVIN 770 DF	White crystalline granules

Guidelines for use

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 ®TINUVIN 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/cm^3
Vapor Pressure (20°C)	1.3 E-8 Pa
Bulk density	
®TINUVIN 770 DF	470 - 510 g/l

Solubility (20°C)	g/100g Solution
Acetone	19
Chloroform	45
Ethanol	-
Ethyl acetate	24
n-Hexane	5
Methanol	38
Methylene Chloride	56
Toluene	-
Water	< 0.01

Volatility (pure substance; TGA-data, heating rate 20°C/min in air)

Temperature (°C)	% weight loss
150	0.7
175	0.7
200	1.0
225	2.1
250	7.2
275	19.8

Handling & 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

®TINUVIN 770 is listed on the following Inventories:

Australia:	AICS	Canada:	DSL	China:	First Import
Europe:	EINECS	Japan:	MITI	Korea:	ECL
Philippines:	PICCS	USA:	TSCA		

®TINUVIN 770 is approved in many countries for use in food contact applications.
For detailed information refer to our Positive List or contact your local sales office.