Hunan Chemical BV

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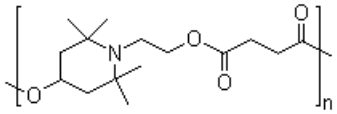
Trade registration nr. 50769421 Chamber of Commerce Amsterdam

Technical Data Sheet

Product name: UV-622
Chemical name: Butanedoic acid, dimethylester, polymer with 4-hydroxy-2,2,6,6-tetramethyl-1-piperidine ethanol
Synonym: Poly-(N-β-hydroxyethyl-2,2,6,6-tetramethyl-4-hydroxy-pperidylsuccinate).
Tinuvin@622
CAS No: 65447-77-0
EC No: 613-797-0
Molecular weight: Mn=3100-4000
Chemical structure:



Quality norm: technical grade
Specification:

Appearance:	White to buff coarse powder
Volatile (%):	0.5 max.
Ash (%):	0.1 max.
Assay (%):	99.0 min.
Light transmittance (%):	
425 nm	97.0 min.
500 nm	98.0 min.

Packing:
25kg net carton on pallets or as required. 500kgs per pallet wrapped and film shrunk.
Loading capacity: 10mt per FCL.

Characterization
UV-622 is the light stabilizer of choice for all applications calling for low volatility and minimal migration, because of its oligomeric structure with high molecular weight. Furthermore UV-622 is effective as antioxidant and contributes significantly to the long-term heat stability of polyolefins and tackifier resins.

Applications
UV-622 areas of application include polyolefins (PP, PE), olefin copolymers such as EVA as well as blends of polypropylene with elastomers.
In addition UV-622 is highly effective in polyacetals, polyamides and polyurethane applications.

Features/Benefits

The effectiveness of UV-622 surpasses significantly that of UV absorbers, particularly in pigmented systems. Combinations of UV-622 with UV absorbers, e.g. UV range or other HALS range in many cases result in synergistic effects. Typical examples are UV-783.

Use Guide

Thick sections*	UV stabilization of HDPE, LLDPE, LDPE and PP	0.15-05.%
Films	UV stabilization of LDPE and LLDPE	0.1-1.2%
Tapes	UV stabilization of HDPE and PP	0.2-0.8%
Fibers	UV stabilization of PP fibers	0.1-1.0%

** The presence of a UV absorber (e.g. UV-326/327/328) is recommended in unpigmented or slightly pigmented articles or to improve the light fastness of certain organic pigments*

Physical Properties

Melting Range	50 - 70 °C
Flashpoint	>250 °C
Specific Gravity (20 °C)	1.22 g/cm3
Vapor Pressure (20 °C)	2.5 E-6 Pa
Bulk density	
UV-622 powder	500 - 700 g/l
UV-622 granular	300 - 500 g/l

Solubility (20°C) % w/w

Acetone	4.0
Chloroforme	> 40
Ethanole	0.08
Ethyl acetate	3.0
n-Hexane	< 0.01
Methanole	0.05
Methylene chloride	> 40
Toluene	15
Water	1.6 mg/l

Volatility **Pure substance; TGA, heating rate 20 °C/min in air**

Weight Loss (%)	Temperature °C
0.1	200
0.2	225
0.4	250
1.1	275
3.1	300
8.4	325

Handling & Safety

In accordance with good industrial practice, handle with care and prevent contamination of the environment.
Avoid dust formation and ignition sources. For more detailed information please refer to the material safety data sheet

Registration

Australia	AICS
Canada	DSL
China	Draft Inventory

Europe	Polymer, monomers on EINECS
Japan	ENCS
Korea	ECL
Philippines	PICCS
USA	TSCA

Food contact
UV-622 is approved in many countries for use in food contact applications

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