Hunan Chemical BV

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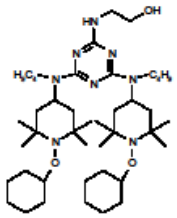
Trade registration nr. 50769421 Chamber of Commerce Amsterdam

Technical Data Sheet

Product name:	UV-152
Product Form:	Off-white powder
Chemical name:	2,4-bis[N-Butyl-N-(1-cyclohexyloxy-2,2,6,6-tetramethylpiperidin-4-yl)amino]-6-(2-hydroxyethylamine)-1,3,5-triazine
Synonym:	2-Aminoethanol reaction products with cyclohexane and peroxidized N-butyl-2,2,6,6-tetramethyl-4-piperidinamine-2,4,6-trichloro-1,3,5-triazine reaction products, Tinuvin®152
CAS No:	191743-75-6
EINECS No:	n/a
Molecular formula:	
Molecular weight:	757
IUPAC name:	Ethanol, 2-amino, reaction products with cyclohexane and peroxidized N-butyl-2,2,6,6-tetramethyl-4-piperidinamine-2,4,6-trichloro-1,3,5-triazine reaction products

Structure formula:



Packing:
In fiber drum or as required

Characterization
UV-152 is a solid non-basic non-migrating HALS for coatings, adhesives and sealants. It is designed to meet high performance and durability requirements of all exterior solvent-based automotive and industrial coating applications where basic HALS fail or where compatibility or migration are an issue. It protects coatings from surface defects such as gloss reduction, cracking and chalking and also improves the retention of mechanical properties.
Its main benefits are:
- non-basic N-OR HALS
- non-migrating, reactable via OH function into NCO- and melaminecrosslinked systems
- good long-term performance
- high thermal stability

Physical property

Appearance:	off-white powder
Glass transition temperature:	72-76°C
Piperidine Eq. Wt.	378.3
Melting point:	83-90°C
Specific Gravity @20°C:	1.07 g/cm^3
Solubility @20°C (g/100g solution)	
Water	0.01
Methyl amyl ketone	75
Methyl iso-amyl ketone	65
n-Butyl acetate	70
Ethyl acetate	75

Application

It is high performance hindered amine light stabilizer, it is used in hot melt, reactive, solvent based and radiation curing adhesives and sealants.

Due to its non-migrating and non-basic properties UV-152 is especially suitable for coatings over plastics or any other substrates where migration of additives needs to be prevented:

plastic coatings (PC, PMMA, PET, sheets, films, packaging, …)
automotive and industrial coatings
powder coatings
coil coatings
adhesives and sealants

For clear-coat applications, UV-152 needs to be combined with a UV absorber (UVA) such as UV-400 (for automotive OEM finishes) or UV-405 (for powder coatings).

Binder systems:

1K and 2K PUR (acrylic/NCO, PES/NCO, …)
acid-catalyzed thermosetting (acrylic, PES/melamine, …)
vinylic (PVC plastisols, PVC copolymers, chlorinated resins)
glycidyl-methylacrylate (GMA) powder coatings

Recommended concentrations:

The concentration of UV-152 depends on the pigmentation of the coating. The amount required for optimum performance should be determined in trials covering a concentration range.

coating type	by weight of total formulation
clear coats	0.5 %
semi-transparent	0.5 – 1.0 %
opaque/solid-shade	1.0 – 2.0 %

Storage

When kept in original unopened containers and at temperatures of 5 – 35 °C (41 – 95 °F), UV-152 can be stored for up to 3 years from the date of manufacture.

Safety

When handling this product please comply with the advice and information given in the safety data sheet and observe protective and workplace hygiene measures adequate for handling chemicals.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. The agreed contractual quality of the product results exclusively from the statements made in the product specification. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed.