

Printing & Packaging

Industrial Coatings

Technical Data Sheet

Tinuvin[®] 770 DF



Product Description

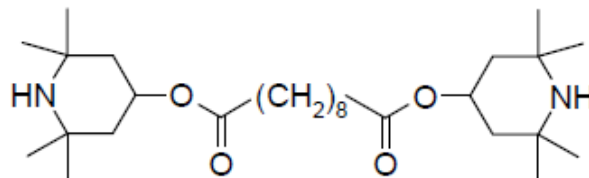
Tinuvin[®] 770 DF is a solid basic hindered amine light stabilizer (HALS) developed for coating, adhesive and sealant applications.

Key Features & Benefits

- Good long term performance
- Good thermal stability

Chemical Structure

tetramethyl piperidine derivative



Properties

Typical Properties

Appearance	white to cream crystalline granules
CAS No:	52829-07-9
Molecular weight	480.7 g/mol
Melting point	81 – 85°C (178 – 185°F)

Solubility at 20°C (g/100 g solution):

Solvesso ¹ 100	20
butyl acetate	20

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These typical values should not be interpreted as specifications.

Applications

Tinuvin[®] 770 DF is designed to meet durability requirements of all exterior solvent-based industrial coatings. It protects coatings against surface defects such as gloss reduction, cracking and chalking and it ensures the retention of mechanical properties. It is broadly compatible and can be easily incorporated to achieve long term light stabilization.

Tinuvin[®] 770 DF is recommended for applications such as:

- Industrial coatings
- Adhesives
- Sealants

Processing

For outdoor applications, Tinuvin[®] 770 DF needs to be combined with UV absorbers such as Tinuvin[®] 400 or Tinuvin[®] 99-2 (for industrial coatings) or Tinuvin[®] 928 or Tinuvin[®] 900 (for adhesives and sealants). For specific UV absorber recommendations, refer to individual technical data sheets.

Binder Systems

- Hot melt (PUR, PA, SIS, SBS, EVA)
- Solvent-based adhesives (acrylic and PUR)
- Sealants (MS polymer)

The amount of Tinuvin® 770 DF required for optimum performance should be determined in trials covering a concentration range. The concentration depends on the pigmentation of the coating.

Recommend Concentrations

<u>Application</u>	<u>Weight % of Tinuvin® 770 DF of total formulation</u>
Clear coats	1.0 – 2.0%
Semi-transparent coatings	0.5 – 1.5%
Opaque/solid-shade coatings	1.0 – 2.0%
Adhesives and sealants	0.5 – 2.0%, depending on substrate and processing conditions

Safety

General

The usual safety precautions when handling chemicals must be observed. These include the measures described in Federal, State and Local health and safety regulations, thorough ventilation of the workplace, good skin care and wearing of protective goggles.

Safety Data Sheet

All safety information is provided in the Safety Data Sheet Tinuvin® 770 DF.

Storage

When kept in the original unopened container and stored at temperatures of 5 – 35°C (41 – 95°F), Tinuvin® 770 DF can be stored for up-to 3 years from the date of manufacture.

Important

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