

® = registered trademark of Ciba Holding Inc.

Tinuvin® 791

Synergistic mixture of oligomeric hindered amine stabilizers

Characterization

Tinuvin 791 is a synergistic mixture of Chimassorb® 944 and Tinuvin 770. It is an excellent light stabilizer especially for PP thick sections, which offers excellent surface protection. It also shows high stabilization efficiency in PP tapes.

Chemical name

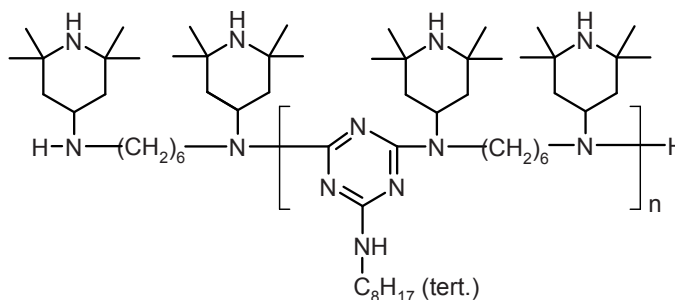
Chimassorb 944: Poly[[6-[(1,1,3,3-tetramethylbutyl)amino]-1,3,5-triazine-2,4-diy]][(2,2,6,6-tetramethyl-4-piperidyl)imino]-1,6-hexanediyl[(2,2,6,6-tetramethyl-4-piperidyl)imino]]

CAS number

Preparation

Structure

Chimassorb 944



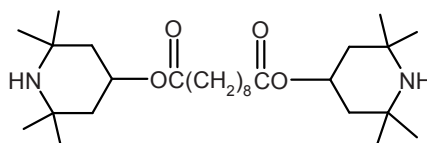
Molecular weight

M_n = 2000–3100 g/mol

Structure

Tinuvin 770

and



Molecular weight

481 g/mol

Applications

Tinuvin 791 areas of application are PP, blends of polypropylene with elastomers and PA: It can also be used in styrenic polymers, e.g. ABS, impact polystyrene, etc.

Features/benefits

Tinuvin 791 is an excellent UV stabilizer for thick sections, e.g. automotive bumpers, fascia, garden furniture etc.

The synergism between the high and low molecular weight HALS components of Tinuvin 791 guarantees maximum protection for the polymer against degradation from UV radiation and long-term heat exposure.

Product forms

Code: Tinuvin 791 FB
Appearance: white to slightly yellow granules, odorless

Guidelines for use

Thick sections*: UV stabilization of PP 0.1–0.8 %
Tapes: UV stabilization of PP 0.1–0.8 %

** The presence of a UV absorber (e.g. Tinuvin 326/328 or Chimassorb 81) is recommended in unpigmented or slightly pigmented articles or to improve the light fastness of certain organic pigments.*

Physical properties

Melting range: approx. 55 °C start
Specific gravity (20 °C): 1.0–1.2 g/cm³
Flashpoint: > 150 °C
Vapor pressure (20 °C): < 0.01 Pa

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. Prevent contamination of the environment. Avoid dust formation and ignition sources.

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

Note

The descriptions, designs, data and information contained herein are presented in good faith, and are based on BASF's current knowledge and experience. They are provided for guidance only, and do not constitute the agreed contractual quality of the product or a part of BASF's terms and conditions of sale. Because many factors may affect processing or application/use of the product, BASF recommends that the reader carry out its own investigations and tests to determine the suitability of a product for its particular purpose prior to use. It is the responsibility of the recipient of product to ensure that any proprietary rights and existing laws and legislation are observed. No warranties of any kind, either expressed or implied, including, but not limited to, warranties of merchantability or fitness for a particular purpose, are made regarding products described or designs, data or information set forth herein, or that the products, descriptions, designs, data or information may be used without infringing the intellectual property rights of others. Any descriptions, designs, data and information given in this publication may change without prior information. The descriptions, designs, data and information furnished by BASF hereunder are given gratis and BASF assumes no obligation or liability for the descriptions, designs, data or information given or results obtained, all such being given and accepted at the reader's risk.

November 2010