

® = registered trademark of BASF SE

Tinuvin® XT 100

High performance light stabilizer system

Characterization

Tinuvin XT 100 is a novel, high performance light stabilizer system based on high molecular weight hindered amine NOR™ light stabilizer.

It is a cost effective UV/thermal stabilizer for mid-pesticide-resistant agricultural film applications, such as greenhouse and mulch films.

Chemical name

Hindered amine light stabilizer

Applications

Agriculture films.

Features/benefits

Tinuvin XT 100 is a cost effective light stabilizers designed to provide stabilization to agriculture films for a longer lifetime. It shows a good performance even in presence of agro-chemicals such as pesticides, insecticides or soil disinfections.

Product forms

Code: Tinuvin XT 100 FF
Appearance: white to off-white granules

Guidelines for use

UV stabilization of greenhouse films 0.2–2%
UV stabilization of mulch films 0.2–2%

Physical properties

Melting range softening range 90–120 °C
Density (20 °C) 1.05 g/cm³
Bulk density 0.507 g/ml

Solubility (20–25 °C) % w/w

Dichloromethane	48
Tetrahydrofurane	48
Water	< 1
n-Octanol	3
Isopropanol	2

Volatility

Weight Loss (% w/w)	
0.3	
0.4	
0.6	
1.4	

**Pure substance; TGA;
heating rate 10 °C/min in air**
Temperature (°C)

200
230
250
280

Handling & Safety

Tinuvin XT 100 requires no special safety measures, provided the usual precautions for handling chemicals are observed. Avoid dust formation and ignition sources.

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

Important notes

1. Use of Tinuvin XT 100 light stabilizer in combination with flame retardants may constitute infringement of Australian Patent No. 735643 or/and US Patent No. 5,393,812 and of any existing equivalent patents or any patents granted on equivalent patent applications in other countries.
2. Please be aware that the presence of BHT antioxidant in plastic articles containing Tinuvin XT 100 can give rise to discoloration if the article is stored in absence of light. This effect normally disappears upon UV exposure without significantly affecting the light stabilization properties of Tinuvin XT 100. Antioxidants like Irganox[®] 1010 and Irganox 1076 do not give rise to such effect in normal conditions.

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 2012