We create chemistry

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Tinuvin® XT 200

High performance light stabilizer system

Characterization

Tinuvin XT 200 is a novel high performance light stabilizer system based on high molecular weight hindered amine NOR™ light stabilizer.
It is an excellent UV/thermal stabilizer and is particularly well suited for agricultural film applications, such as greenhouse and mulch films.

Chemical name

Hindered amine light stabilizer

Applications

Tinuvin XT 200 areas of applications include polyolefin (PP, PE) as well as polyolefin copolymers, such as EVA and EBA.

Features/benefits

Tinuvin XT 200 is designed to provide stabilization to agricultural films even in presence of high amount of agro-chemicals such as pesticides, insecticides or soil disinfection agents. It shows outstanding performance also as long-term stabilizer; this behaviour is especially useful where films are in contact with greenhouse frames (wood, iron, aluminium).

Product forms

Code:	Tinuvin XT 200 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 %

Combined with UV absorbers (e. g. Tinuvin 326) it may give rise to synergistic mixtures.

Physical properties

Melting range	softening range 100–130 °C (capillary visual)
Density (20 °C)	1.05 g/cm^3 (DIN EN ISO 787-10 Method B –VDF: Methanol)
Bulk density	450–520 g/l

Solubility (20– 25 °C)	**% w/w**
Dichloromethane	25 –35
Ethyl acetate	10–20
Tetrahydrofurane	35–45
Toluene	35–45
Water	< 1
n-Hexane	< 1
n-Octanol	< 1

Volatility Weight loss (% w/w)	**Pure substance; TGA-data, heating rate 10 °C/min in air** Temperature °C
0.2	200
0.3	225
0.8	250
1.8	275

Handling & Safety

Tinuvin XT 200 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 Tivunin XT 200 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 Tivunin XT 200 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 Tivunin XT 200. Antioxidants like Irganox® 1010 and Irganox 1076 do not give rise to such effect in normal conditions.

Note

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BASF Schweiz AG
Performance Chemicals/Plastic Additives
Klybeckstrasse 141
4057 Basel, Switzerland