

Technical Information

April 2013

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Light Stabilizers

Tinogard® TL

UV Light Stabilizer

For protection of clear packaged products

Uses

Tinogard® TL is a broadband UV absorber for stabilization of transparent packaged products. It is specifically tailored to the needs of the Personal Care industry. It protects colors, fragrances, natural compounds and other sensitive ingredients from photolytic and/or photooxidative degradation, thus providing long-lasting shelf life even with light sensitive formulations.

Chemical Name

2-(2H-benzotriazol-2-yl)-6-dodecyl-4-methyl-phenol

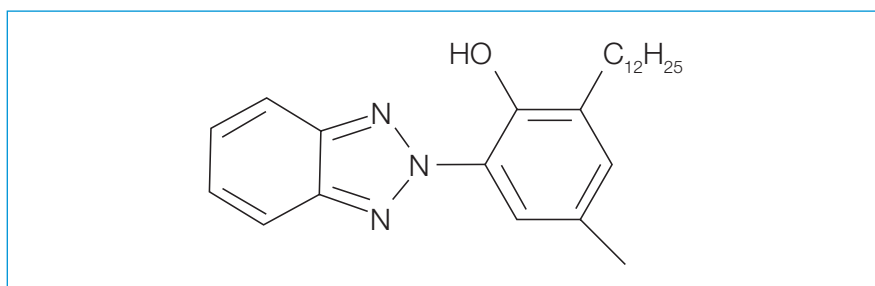
INCI Name

Benzotriazolyl Dodecyl p-Cresol

PRD-No.*

30483522

* BASF's commercial product numbers

Structure**Chemical Character**

Nonionic, oil & alcohol soluble

Molecular weight

394 g/mol

Product form

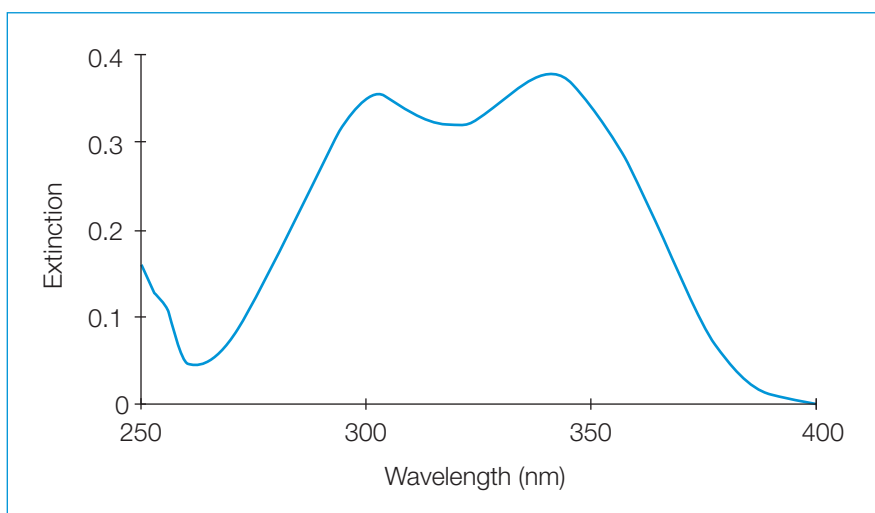
Yellowish oil

Shelf Life

60 months

Spectrum

Tinogard® TL (10 mg/L in iso-propanol)



Physical Properties

Melting Point (°C): -56

| Solubility (20 °C) | g/100 g solution |
|---------------------------|-------------------------|
| Ethyl Acetate | > 50 |
| Acetone | > 50 |
| PEG-7 Glyceryl Cocoate | 12 |
| Ethanol | 12 |
| 2-Propanol | 11 |
| Isopropyl Myristate | 10 |

Guidelines for use

Tinogard® TL is an oil and alcohol soluble UV absorber. At room temperature its physical form is liquid, making it easy to handle and formulate. It is suitable for alcoholic and hydro-alcoholic formulations, oils, waxes, emulsions and fragrance oils. It can also be incorporated into aqueous formulations via the oil or fragrance phase, or via solubilizers. Concentrations of 0.01 to 0.10% are usually sufficient to stabilize formulations against photolytic degradation. Optimal incorporation levels depend on the individual formulation, the packaging and long-term stability requirements. Very strong and effective stabilizer systems can be created by combining Tinogard® TL with the excited state quencher Tinogard® Q.

Health & Safety

In accordance with good industrial practice, handle with care and prevent contamination of the environment. Avoid dust formation and ignition sources. For more detailed information please refer to the material safety data sheet.

Note

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