

## Technical Information

**Tinogard® TL**

PRD 30483522

Valid since 16.01.2019  
Revision 1.1

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**Care Chemicals****UV Light Stabilizer****INCI name(s)**

Benzotriazolyl Dodecyl p-Cresol

**Chemical description**

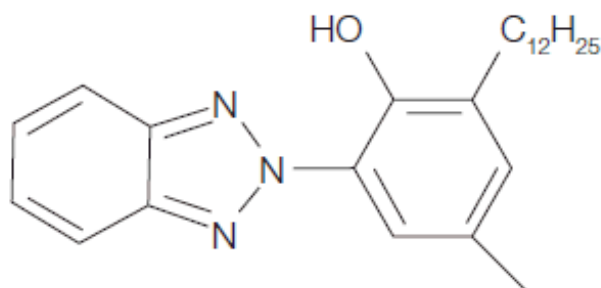
2-(2H-benzotriazol-2-yl)-6-dodecyl-4methyl-phenol

**Physical form:**

Yellowish liquid

**Molecular weight**

394 g/mol

**Structural Formula****CASR-No.**  
125304-04-3**Ingredient**  
2-(2H-benzotriazol-2-yl)-6-dodecyl-4methyl-phenol

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**Care Chemicals****Characteristic values**

The specifications stated in the paragraphs 'Quality control data' and 'Additional product descriptive data' finally and conclusively describe the properties of the product.

**Quality control data**

(Data which is used for quality release and is certified for each batch.)

<b>Test property</b>	<b>Specification</b>
Appearance	Viscous liquid
Aspect	Viscous liquid
Characteristic	Clear
Product color	Yellow
Solubility at 25 °C, charac. (5 % in ethylacetate, 10 mm)	Clear
Transmission at 440 nm (5 % in ethylacetate, 10 mm)	min. 90.0
Content (10 mg/l ethylalc., 340 nm, 10 mm)	min. 93.0 %

Specific methods used for batch release see Certificate of Analysis.

**Additional product descriptive data**

(Data which is proven statistically but not determined regularly.)

<b>Test property</b>	<b>Specification</b>
Total viable count	≤ 100 CFU/g
Gram negative bacilli	≤ 0 Neg/0.1 g

Specific methods used for batch release see Certificate of Analysis.

**Typical values**

(For information purposes only, not part of the guaranteed specifications.)

<b>Property</b>	<b>Value</b>
Melting Point	-56 °C

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**Care Chemicals**

## Storage information

### Shelf life

60 months

### Storage temperature

Room temperature

### Storage conditions

In original sealed containers and protected from moisture

## Stabilising additives / Auxiliaries

### Preservatives

not present

### Antioxidants

not present

### Solvents

not present

### Others

not present

## General information

### Raw material basis

Synthetic: (mineral oil / natural gas)

## Composition hints for finished product label

### INCI Components

#### INCI Name (US/EU/CN)

Benzotriazolyl Dodecyl p-Cresol

#### Content

Complete \*

\* Complete means conclusively describes the substance

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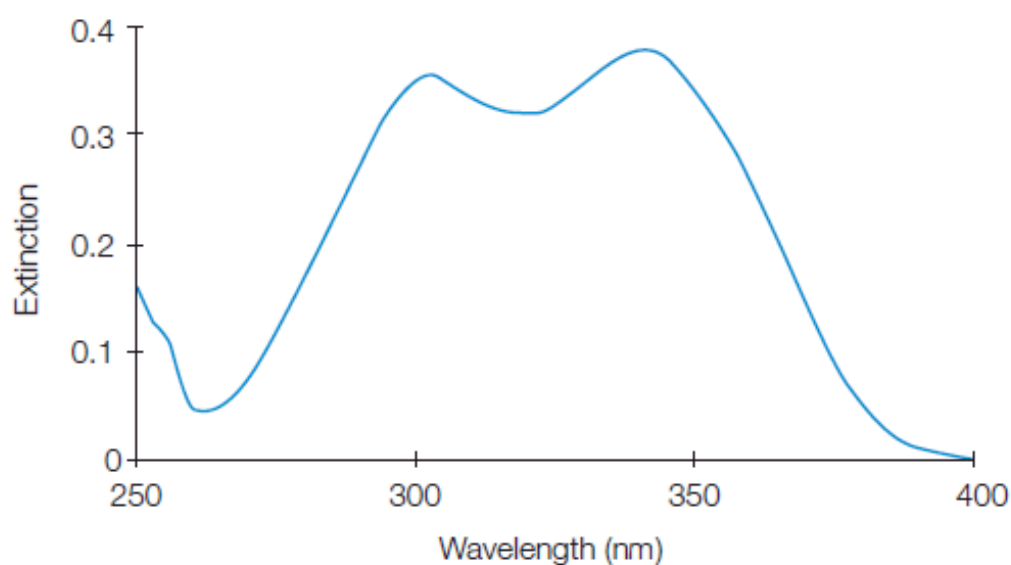
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**Care Chemicals****Product properties****Solubility**

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

**Specific technical data**

## Spectrum



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



We create chemistry

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Care Chemicals

## Miscellaneous information

### Performance

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.

### Example of use

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.

### Intended for use as cosmetic ingredient

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