

## Technical Information

### Tinosorb® M

PRD 30482916

Valid since 12.03.2019  
Revision 1.1

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**Care Chemicals**

### UV Filter

#### INCI name(s)

Methylene Bis-Benzotriazolyl Tetramethylbutylphenol (and) Aqua (and) Decyl Glucoside (and) Propylene Glycol (and) Xanthan Gum

#### Chemical description

Aqueous dispersion of 2,2'Methylene-bis-(6-(2H-Benzotriazole-2-yl)-4-(1,1,3,3-Tetramethylbutyl)-Phenol, Alkylpolyglucoside, Propylene Glycol, Xanthan Gum.

#### Physical form:

White liquid

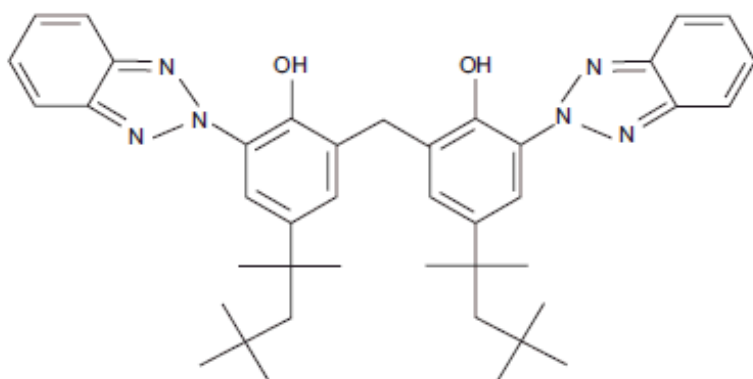
#### Molecular weight

659 g/mol

#### Molecular Formula

C<sub>41</sub>H<sub>50</sub>N<sub>6</sub>O<sub>2</sub>

#### Structural Formula



#### CASR-No.

103597-45-1

68515-73-1

110615-47-9

57-55-6

11138-66-2

#### Ingredient

Methylene Bis-Benzotriazolyl  
Tetramethylbutylphenol

Alkylpolyglycoside

Alkylpolyglycoside

Propylene Glycol

Xanthan Gum

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**Care Chemicals****Application**

Tinosorb® M belongs to BASF's "particulate organic UV filter" technology. It is a broad-spectrum UV filter that shows absorption over the whole UV range and reaches even protection into the visible (blue) light. Thanks to its strong absorbance in the UVA-I range, Tinosorb® M shows strong contribution to the UVA-PF and, therefore, efficiently helps to fulfill the EC recommendation for UVA protection in each type of UV filter system. The combination of Tinosorb® M with the UVA filter Uvinul® A plus is of particular interest in respect of efficient and photostable UVA protection.

Moreover, Tinosorb® M boosts the performance of all oil soluble UV filters thanks to its scattering properties related to its particulate form. As a photostable UV filter Tinosorb® M also increases the photostability of other UV filters.

The microfine dispersion is compatible with most cosmetic ingredients. The Tinosorb® M dispersion can be post-added to emulsions and is therefore suitable for cold process formulations.

**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.)

Test property	Specification	Test method
Appearance	Viscous dispersion	TS_M_ASP
Product color	White	TS_M_ASP
Odor	Trace characteristic odor	TS_M_odor
pH	10.5 - 12.0	TS_M_pH
Absorbance (40 mg/l, DMA/IPA, 346 nm, 10 mm)	0.936 - 1.014	TS_M_AS
Absorbance (1 % dil./1 cm)	234 - 254	TS_M_AS
Active substance (derived from absorbance test result)	48.0 - 52.0 %	TS_M_AS
Viscosity (25 °C; Haake MVDIN; D= 100 1/s)	200 - 1000 mPas	TS_M_VISC
Dry content (1 g, 135 °C, 60 min)	55.5 - 59.5 %	TS_M_dry_content
Total viable count	<= 100 cfu/g	AA_Biozide_MM

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**Care Chemicals****Storage information****Shelf life**

24 months

**Storage temperature**

Between 0 °C and + 40 °C

**Storage conditions**

In original sealed containers and protected from moisture

**Additional information**

Keep container tightly closed in a cool place.

Store frost-free.

Mix thoroughly before use.

**Stabilising additives / Auxiliaries****Preservatives**

not present

**Antioxidants**

not present

**Solvents**

not present

**Others**

Decyl Glucoside, Propylene Glycol, Xanthan Gum

**General information****Raw material basis**

Vegetable: (coconut / palm kernel oil)

Synthetic: (natural oil / gas)

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**Care Chemicals****Composition hints for finished product label****INCI Components**

<b>INCI Name (US/EU/CN)</b>	<b>Content</b>
Methylene Bis-Benzotriazolyl Tetramethylbutylphenol (nano) (EU)	48.0 - 52.0 %
Methylene Bis-Benzotriazolyl Tetramethylbutylphenol (CN)	48.0 - 52.0 %
Bisocetrizole (US)	48.0 - 52.0 %
Decyl Glucoside	6.0 - 10.0 %
Propylene Glycol	0.2 - 0.6 %
Xanthan Gum	0.1 - 0.5 %

**Water Content****Content**  
36.9 - 45.7 %

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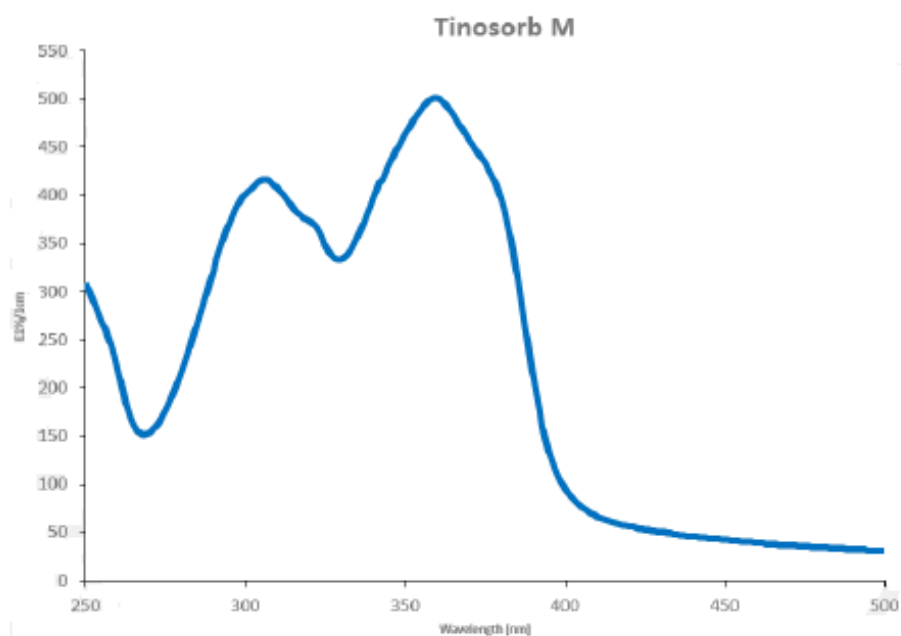
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**Care Chemicals**

### Specific technical data

UV spectrum





We create chemistry

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## Approval status

Region	Amount in %
EU	10 (**)
Switzerland	10 (**)
India	10 (**)
Taiwan	10 (**)
Korea	10 (**)
Japan (*)	10 (**)
China	10 (**)
Australia	10 (**)
ASEAN	10 (**)
USA	-
Canada	-
S. America	10 (**)
Mexico	10 (**)

(\*) Japan: limit except for cosmetics coming into contact with mucous membranes

(\*\*) Amount in % as active ingredient

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