

## Technical Information

**Uvinul® MC 80**

PRD 30055079

|             |            |
|-------------|------------|
| Valid since | 03.01.2018 |
| Revision    | 1.2        |
| WF-No.      | 14219      |
| Page        | 1 of 6     |

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**Care Chemicals****UV Filter****INCI name(s)**

Ethylhexyl Methoxycinnamate

**Chemical description**

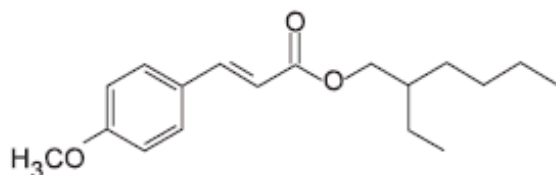
p-Methoxycinnamic Acid 2-Ethylhexyl Ester

**Physical form:**

Colorless to light yellow liquid

**Molecular weight**

290 g/mol

**Molecular Formula**C<sub>18</sub>H<sub>26</sub>O<sub>3</sub>**Structural Formula****CASR-No.**

5466-77-3

**Ingredient**

p-Methoxycinnamic Acid 2-Ethylhexyl Ester

**Application**

Uvinul® MC 80 is a lipophilic liquid and the most frequently used UVB filter. It is approved worldwide and can be readily incorporated in all formulation types. Its liquid form makes it an excellent solvent for other crystalline UV filters in powder form such as Uvinul® A Plus, Uvinul® T 150 or Tinosorb® S. Uvinul® MC 80 shows high cosmetic elegance; it is odorless and colorless.

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| Page        | 2 of 6     |

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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.)

| Test property   | Specification   | Test method          |
|---|---|----------------------|
| <b>Characters</b>                                       |   |                      |
| Appearance  | Colorless to light yellow                                     | PM/01055             |
| Odor  | Very weak characteristic odor                                 | PM/01340             |
| <b>Identification</b>                                   |   |                      |
| Identification  | Must comply   | USP *                |
| <b>Tests</b>  |   |                      |
| Assay   | 95.0 - 105.0 g/100 g  | USP                  |
| Purity (GC)   | min. 99.0 % Area  | USP                  |
| Impurities (GC)   | Each individual impurity 0.5 %<br>Total impurities max. 2.0 % | USP                  |
| Specific absorbance (A1 % / 1 cm),<br>310 nm in Ethanol | min. 850  | PM/00256             |
| Color Hazen   | max. 70 APHA  | PM/00914             |
| Refractive Index n(20/D)                                | 1.542 - 1.548   | USP                  |
| Specific Gravity d(25/25)                               | 1.005 - 1.013   | USP                  |
| Acidity   | Must comply   | USP                  |
| Peroxide value  | max. 1.0 meq/kg   | Ph.Eur. 2.5.5 Meth A |

## Notes:

\* May also be guaranteed by other means/methods (General notices of USP)



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### Uvinul® MC 80

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Valid since 03.01.2018  
Revision 1.2  
WF-No. 14219  
Page 3 of 6

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**Care Chemicals**

## Storage information

### Shelf life

36 months

### Storage temperature

Room temperature.

### Storage conditions

In original sealed containers and protected from moisture

## Stabilising additives / Auxiliaries

### Preservatives

not present

### Antioxidants

BHT

### Solvents

not present

### Others

not present

## General information

### Raw material basis

Synthetic: (mineral oil / natural gas)

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| Page        | 4 of 6     |

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

| <b>INCI Name (US/EU/CN)</b>         | <b>Content</b> |
|-------------------------------------|----------------|
| Ethylhexyl Methoxycinnamate (EU/CN) | 99.93 %        |
| Octinoxate (US)                     |                |

**Auxiliaries**

| <b>INCI Name (US/EU/CN)</b> | <b>Content</b> |
|-----------------------------|----------------|
| BHT                         | 0.07 %         |

**Product properties****Solubility**

| <b>Trade name</b>     | <b>INCI name</b>                           | <b>Solubility ability at 25 °C Wt (%)</b> |
|-----------------------|--|---|
| Uvinul® A Plus (BASF) | Diethylamino Hydroxybenzoyl Hexyl Benzoate | 39.0                                      |
| Tinosorb® S (BASF)    | Bis-Ethylhexyloxyphenol                    | 17.0                                      |
| Uvinul® T 150 (BASF)  | Methoxyphenyl Triazine                     |   |
|                       | Ethylhexyl Triazone                        | 14.0                                      |

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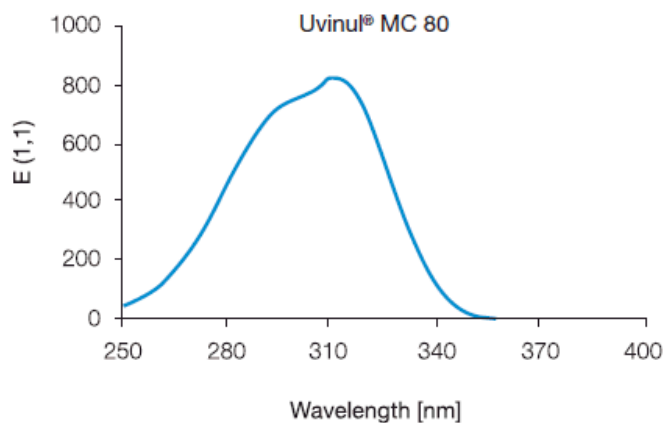
PRD 30055079

Valid since 03.01.2018  
Revision 1.2  
WF-No. 14219  
Page 5 of 6

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**Care Chemicals****Specific technical data**

UV spectrum

**Approval status**

| Region      | Amount in % |
|-------------|-------------|
| EU          | 10          |
| Switzerland | 10          |
| India       | 10          |
| Taiwan      | 10          |
| Korea       | 7.5         |
| Japan (*)   | 20          |
| China       | 10          |
| Australia   | 10          |
| ASEAN       | 10          |
| USA         | 7.5         |
| Canada      | 8.5         |
| S. America  | 10          |
| Mexico      | 10          |

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



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Revision 1.2  
WF-No. 14219  
Page 6 of 6

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**Care Chemicals**

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