

## Technical Information

**Uvinul® N 539 T**

PRD 30055082

Valid since 03.08.2017  
Revision 2.0

Page 1 of 5

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

Octocrylene

**Chemical description**

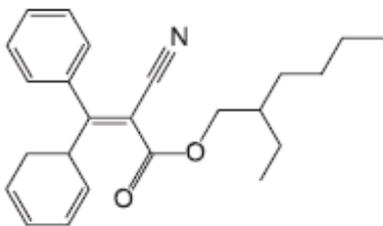
2-Cyano-3,3-Diphenyl Acrylic Acid, 2-Ethylhexyl Ester

**Physical form:**

Clear yellow viscous liquid

**Molecular weight**

361 g/mol

**Molecular Formula**C<sub>24</sub>H<sub>27</sub>NO<sub>2</sub>**Structural Formula****CASR-No.**

6197-30-4

**Ingredient**2-Cyano-3,3-Diphenyl Acrylic Acid, 2-Ethylhexyl  
Ester**Application**

Uvinul® N 539 T is an oil-miscible UVB filter that is approved worldwide for the use in sun care preparations. It shows excellent photostability and is even able to efficiently photostabilize photoinstable UV filters. For the achievement of higher SPF values, it is recommended to combine Uvinul® N 539 T with other UV filters such as Uvinul® T 150 or Uvinul® MC 80.

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Page 2 of 5

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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	Clear, yellow and viscous liquid	Visual, PM/01055
Color (Gardner undiluted substance)	Max. 4.0	ASTM 1544
<b>Identification</b>		
Identification	Must comply	USP <Octocrylene> *
<b>Tests</b>		
Specific absorption (E 1/1, 302 nm)	340 - 369	PM/00271
Maximum of absorption	301 - 305 nm	PM/00271
k-value	34.0 - 36.9	E1%/1cm/10
Refractive index n (20/D)	1.561 - 1.571	USP <Octocrylene>
Specific gravity d (25/25)	1.045 - 1.055	PM/00379
Acidity	Must comply	USP <Octocrylene>
<b>Chromatographic purity</b>		
Any other impurity	max. 0.5 area-% (each)	PM/00760
Total impurities	max. 2.0 area-%	PM/00760
Purity (GC)	min. 98.0 area-%	PM/00760
Benzophenone	max. 200 mg/kg	PM/01710
<b>Assay</b>		
Content (GC)	95.0 - 105.0 %	PM/00760

## Notes:

\* Uvinul® N 539 T meets the requirements of the current USP monograph &lt;Octocrylene&gt;.

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Page 3 of 5

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**Care Chemicals**

## Storage information

### 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)

Octocrylene

#### Content

Complete \*

\* Complete means conclusively describes the substance

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Page 4 of 5

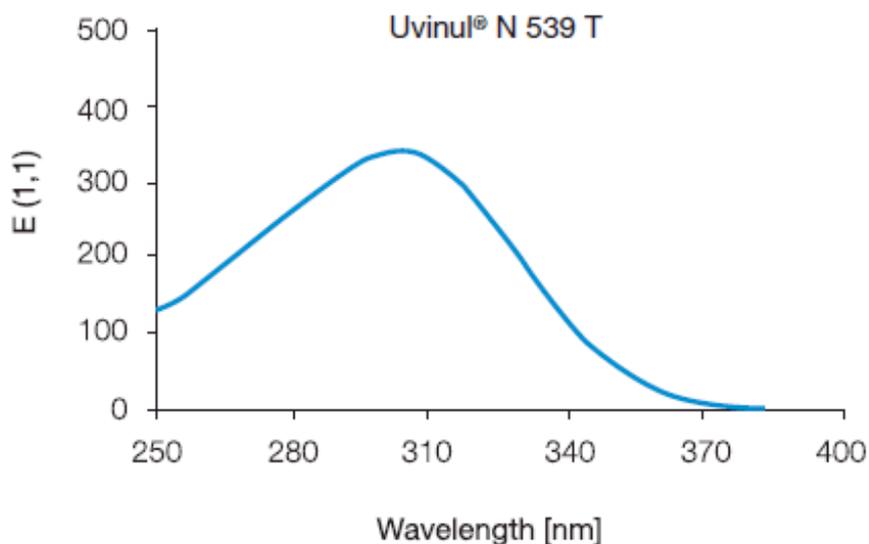
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**Care Chemicals****Product properties****Solubility**

Trade name	INCI name	Solubility ability at 25 °C Wt. (%)
Uvinul® A Plus Granular (BASF)	Diethylamino Hydroxybenzoyl Hexyl Benzoate	39.0
Tinosorb® S (BASF)	Bis-Ethylhexyloxyphenol	7.3
Uvinul® T 150 (BASF)	Methoxyphenyl Triazine Ethylhexyl Triazone	4.2

**Specific technical data**

UV spectrum



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Page 5 of 5

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**Care Chemicals****Approval status**

<b>Region</b>	<b>Amount in %</b>
EU	10
Switzerland	10
India	10
Taiwan	10
Korea	10
Japan (*)	10
China	10
Australia	10
ASEAN	10
USA	10
Canada	12
S. America	10
Mexico	10

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

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