

Technical Data Sheet

Octocrylene

Product Code: Mfsorb® 104

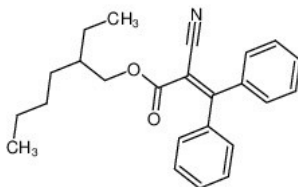
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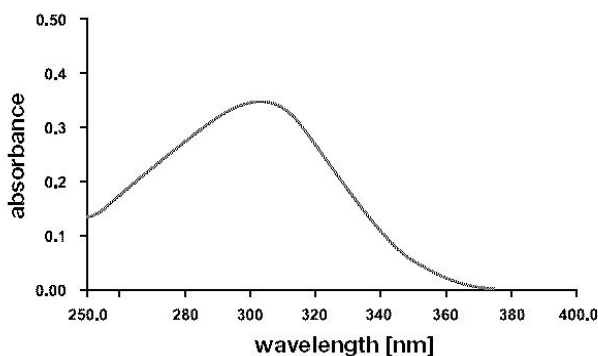
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Organic UV Filter

Production Site:	MFCI (Huanggang) Co., Ltd.
INCI Name:	Octocrylene
Chemical Name:	2-Ethylhexyl 2-cyano-3,3-diphenylacrylate
Other names:	2-Cyano-3,3-diphenyl-2-propanoic acid 2-ethylhexyl ester; Octocrilene; UV-3039
Molecular Formula:	C ₂₄ H ₂₇ NO ₂
Molecular Weight:	361.48
CAS No.:	6197-30-4
EINECS No.:	228-250-8
Structural Formula:	



UV Characteristics



Application

Octocrylene is an oil-soluble UV-B filter that is approved for use in sunscreen preparations in many countries. As it is miscible with many cosmetic oils, it can readily be incorporated in the oily phase of emulsions and it is particularly suitable for water-repellent and water-resistant formulations. It can be combined with other oil-soluble UV filters such as Benzophenone-3 to give products with a high SPF.

Octocrylene is insensitive to metal ions and effective over a wide range of pH values. It can be used in silicone emulsions (polishes, 0.3-1.0%), liquid inks, acrylic, vinyl and other adhesives.

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(0.3-1.0%), Acrylic resins, Urea-formaldehyde resins, Alkyd resins, Epoxy resins, Cellulose nitrate, PUR systems, Oil paints, Polymer dispersions.

Specifications

Quality control data

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

Test property	Specification	Remark
Characters		
Appearance:	Clear yellow viscous liquid.	
Identification		
Identification (UV):	A. Ultraviolet Absorption <197U> Absorptivities at 303nm do not differ by more than 3.0%.	USP
Identification (GC):	B. The retention time of major peak of the sample solution corresponds to that of the standard solution, as obtained in the Assay.	USP
Tests		
Specific Gravity (at 25°C):	1.045~1.055	USP
Refractive Index (at 20°C):	1.561~1.571	USP
Acidity (0.1mol/L NaOH):	Max. 0.18ml	USP
Specific Extinction: (E1%, 1cm at 303nm)	340~370	
Gardner Color: (10% in toluene)	Max. 4	
Assay		
Assay (GC):	95.0%~105.0%	USP
Purity (GC):	Min. 98.0%	
Impurities		
Total Impurities:	Max. 2.0%	USP
Individual Impurity:	Max. 0.5%	USP
Benzophenone:	Max. 100ppm	
2-Ethylhexanol:	Max. 500ppm	

Other quality data

(Data which is obtained through the evaluation and is not certified for each batch, for reference only.)

Test property	Specification
Microbiology	
Total Aerobic Micro Count (TAMC):	Max. 100 cfu/g
Total Yeast and Mold Count (TYMC):	Max. 100 cfu/g

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Test property

Specification

Pathogens

Escherichia coli:	Negative in 1 g
Salmonella:	Negative in 1 g
Candida albicans:	Negative in 1 g
Staphylococcus aureus:	Negative in 1 g
Pseudomonas aeruginosa:	Negative in 1 g

Heavy Metals

Nickel (Ni):	Max. 1 ppm
Mercury (Hg):	Max. 1 ppm
Antimony (Sb):	Max. 1 ppm
Lead (Pb):	Max. 5 ppm
Arsenic (As):	Max. 2 ppm
Cadmium (Cd):	Max. 1 ppm
Cobalt (Co):	Max. 1 ppm
Chrome (Cr):	Max. 1 ppm
Total:	Max. 10ppm

Residual solvents

Meets the requirements of ICH/USP.

Remark

This product manufactured by our company meets the requirements of current USP monograph.

Storage information

Packaging Information

25kgs/drum, 200kgs/drum, 1000kgs/drum.

Shelf life

24 months, in original, unopened containers.

Storage conditions

Preserve in well-closed containers. Store at room temperature.

Additional information

None.

Disclaimer

The information contained in this data sheet is based on our present and best knowledge. However we make no warranty, whether expressed or implied, including warranties of merchantability or of fitness for a particular use or purpose, as conditions and methods of use are beyond our control. Further, nothing contained herein shall be taken as any inducement or recommendation to use, manufacture or sell that may infringe any patents or any other proprietary rights now or hereafter in existence, nor to imply compliance with any regulatory requirements.