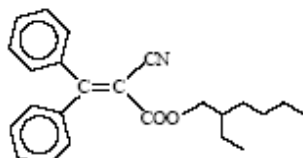


TECHNICAL DATA SHEET



1. Trade name:	Sunsafe® OCR (USP)
2. Catalog number	21001
3. INCI name:	Octocrylene
4. Other name:	2-Cyano-3,3-diphenylacrylic acid, 2'-ethylhexyl ester
5. Molecular formula:	C ₂₄ H ₂₇ NO ₂
6. Molecular weight:	361.48
7. CAS no. :	6197-30-4
8. Appearance:	Clear yellow viscous liquid
9. Assay % (GC):	98 min
10. Acid value (mg KOH/g):	1.0 max
11. Color (Gardner):	6 max
12. Impurity:	
12.1 Benzophenone area-%:	0.5 max
12.2 Any impurity area-%:	0.5 max
12.3 Total impurities area-%:	2.0 max
13. Extinction (E1%,1cm) in methanol:	340 – 369
14. Relative density (D25/25):	1.045 - 1.055
15. Refractive index (20°C):	1.561 -1.571
16. Package:	200kg net per HDPE drum, 16,000kgs net per 20', palletized and shrink-rapped.
Application:	
I A secondary UV-B absorber for high-SPF formulas.	



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Sunsafe[®] OCR (USP)

Trade name: Sunsafe[®] OCR

Catalog no.: 21001

INCI name: Octocrylene

Chemical name: 2-Cyano-3,3-diphenylacrylic acid, 2'-ethylhexyl ester

CAS: 6197-30-4

Batch Number: U20150330-1

Manufacturing date: 30 Mar, 2015

Expiry date: 29 Mar, 2018

Quantity: 1000kg

Items	Specification	Results
1. Appearance:	Clear yellow viscous liquid	Pass
2. Assay % (GC):	98 min	99.36
3. Acid value (mg KOH/g):	1.0 max	0.06
4. Color (Gardner):	6 max	4.6
5. Impurity		
5.1 Benzophenone area-%:	0.5 max	0.16
5.2 Any impurity area-%:	0.5 max	0.18
5.3 Total impurities area-%:	2.0 max	0.64
6. Extinction (E1%,1cm) in methanol:	340 - 369	350
7. Relative density (D25/25):	1.045 - 1.055	1.049
8. Refractive index (20°C):	1.561 -1.571	1.568
Conclusion:	Pass	

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MATERIAL SAFETY DATA SHEET

Section 1 - Chemical Product and Company Identification

Trade name: Sunsafe[®] OCR

Catalog no.: 21001

INCI name: Octocrylene

Synonyms: 2-Cyano-3,3-diphenylacrylic acid, 2'-ethylhexyl ester

Company identification:

Uniproma Chemical Co., Limited

9-405, 231Greenland Avenue, Huaqiao, Kunshan, Suzhou, Jiangsu, 215332 China.

E-mail: info@uniproma.com

Website: www.uniproma.com

Section 2 - Composition, Information on Ingredients

CAS no.	Product name	Content	EINECS no.
6197-30-4	Octocrylene	98.0% min	228-250-8

Molecular Weight: 361.48

Molecular Formula: C₂₄H₂₇NO₂

Section 3 - Hazards Identification

NFPA Ratings (Scale 0-4): Health = 1 Fire = 1 Reactivity = 0

Major Health Hazards: No significant target effects reported.

Physical Hazards: Dust/air mixtures may ignite or explode.

Potential Health Effects: Avoid contact with eyes and skin. Wash thoroughly after handling.

As with all chemicals, good industrial hygiene practices should be followed when handling this material.

Avoid freezing or excessive heat. Do not handle or store near an open flame, heat or other sources of ignition. Keep the container tightly closed and in a cool, well-ventilated place.

Section 4 - First Aid Measures

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Skin Contact: Wash off with soap and plenty of water. Do not use organic solvents. In case of dermatitis, seek medical attention.

Eye Contact: Rinse immediately with plenty of water for at least 15 minutes. In case of eye irritation, seek medical attention.

Inhalation: Move to fresh air. In case of irritation of respiratory system or mucous membranes, seek medical attention. In case of indisposition, seek medical attention. In case of prolonged exposure, seek medical attention.

Ingestion: Immediately give plenty (>500 ml) of water (if possible charcol slurry). In case of spontaneous vomiting be sure that vomitus can freely drain due of danger of suffocation. Give water repeatedly. Artificial induction of vomiting should be restricted to first aid staff. Give nothing by mouth in cases of unconsciousness or convulsion. Seek medical advice.

Section 5 - Fire Fighting Measures

Suitable Extinguishing Media: Water spray. Carbon dioxide, dry chemical powder or appropriate foam.

Extinguishing Media Which Must Not Be Used for Safety Reasons: High volume water jet.

Fire and Explosion Hazards: Slight fire hazard. Dust/air mixtures may ignite.

Special Protective Equipment for Firefighters: Wear full protective clothing. Wear self-contained breathing apparatus.

Hazardous Decomposition Products: Oxides of carbon, toxic gases/vapours.

Section 6 - Accidental Release Measures

Personal Precautions: Do not breathe vapors/dust. Remove all sources of ignition. Avoid contact with skin, eyes and clothing.

Environmental Precautions: Do not flush into surface water, sanitary sewer or ground water system.

Methods for Cleaning Up: Use mechanical handling equipment. Collect the spilled product into suitable containers, which must be tightly sealed and properly labelled. Avoid dust formation.

Section 7 - Handling and Storage

HANDLING: Use methods to minimize dust.

STORAGE: Store and handle in accordance with all current regulations and standards. Store in a cool, dry place. Store in a well-ventilated area. Keep container tightly closed. Keep separated from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

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Exposure Limit(s): None listed in ACGIH, NIOSH and OSHA.

Technical Measures / Precautions: Exposure limit(s) should be monitored using suitable analytical equipments.

Respiratory Protection: Effective dust mask.

Hand Protection: Protective gloves.

Eye Protection: Suitable goggles or face protection.

Skin and Body Protection: Working clothes, closed footwear.

Section 9 - Physical and Chemical Properties

Appearance: Clear yellow viscous liquid

Melting Point: Not applicable.

Boiling Point: Not applicable.

Flash Point: 119°C **Density:** 1.478 g/cm³. (20°C)

Solubility in water: 1.3 mg/l (20°C)

pH Value: Not available

log P(oct): 6.88

Refractive index: 1.561-1.571

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Static discharges, incompatible materials, dust generation, excess heat.

Materials to Avoid: Strong bases and strong oxidizing agents.

Hazardous Decomposition Products: Oxides of carbon, irritating and toxic fumes/gases.

Section 11 - Toxicological Information

Acute Toxicity: LD₅₀(oral, rat): >67000mg/kg.

Carcinogenicity: Not listed by ACHIH, IARC, NIOSH, NTP and OSHA.

Health Effects:

Skin irritation test (rabbit): No irritation.

Eye irritation test (rabbit): No irritation.

Sensitization test(quinea pig): No sensitizing potential.

Further toxicological information: No mutagenic properties suspected.

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Bacterial mutagenicity: Ames-Test: No indication of mutagenic activity.

No teratogenic properties suspected.

Experience in man: No sensitizing effect. No irritation.

Further data: The product should be handled with the care usual when dealing with chemicals.

Section 12 - Ecological Information

Biologic degradation:

Readily biodegradable.

Behavior in environmental compartments;

Log P(oct): 6.88

An appreciable bioaccumulation potential is to be expected($\log P(o/w) > 3$).

Ecotoxic effects:

Fish toxicity: L.idus LC50: >10000mg/1/96h.

Bacterial toxicity: Daphnia EC50: 3.6mg/1.

Further ecologic data:

When introduced properly, no impairments in the function of adapted biological waste -water- treatment plants are to be expected. No ecological problems are to be expected when the product is handled and used with due care and attention.

Section 13 - Disposal Considerations

Waste from Residues / Unused Products: Residual chemical should be disposed by incineration or by other modes of disposal in compliance with local legislation.

Contaminated Packaging: Contaminated packaging material should be treated equivalent to residual chemical. Clean packaging material should be subjected to waste management schemes (recovery recycling, reuse) according to local legislation.

Section 14 - Transport Information

	IATA	IMO	RID/ADR
Shipping Name:	Not regulated as a hazardous material	Not regulated as a hazardous material	Not regulated as a hazardous material
Hazard Class:			

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UN Number:			
Packing Group:			

Section 15 - Regulatory Information

Classification: Self-classification.

Risk Phrases: R51/R53 Toxic to aquatic organisms, may cause long-term

S-Phrase(s): S61 Avoid release to the environment.

Regulatory Status:

US: 7~10% max.

EU: 10% max.

Brazil: 10%

Australia: Approved

Others: For use as a UV stabilizer in the manufacture of unplasticized polyvinyl chloride (PVC) and of polyethylene terephthalate (PET) polymers and copolymers complying with 21 CFR 177.1315, or 21 CFR 177.1630.

Section 16 - Other Information

REVISED DATE: November 1, 2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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