Technical Data Sheet

# MFSORB 507

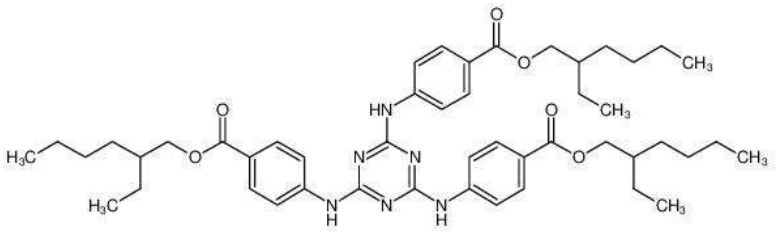
Product Code: Mfsorb® 507



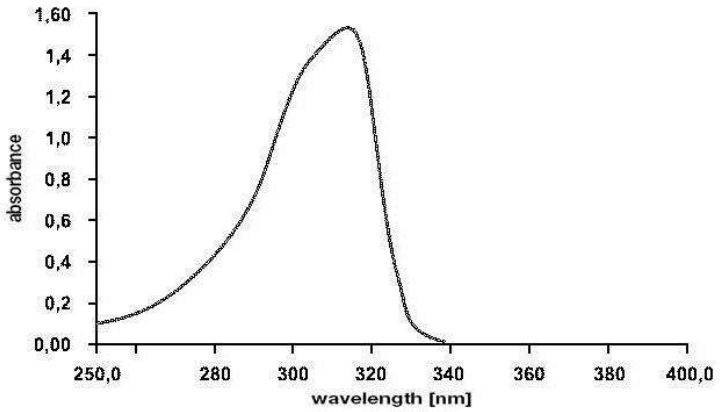
## Organic UV Filter

| | |
|---|---|
| **Production Site:** | MFCI (Huanggang) Co., Ltd. |
| **INCI Name:** | Ethylhexyl Triazone |
| **Chemical Name:** | 4,4',4''-(1,3,5-Triazine-2,4,6-triyltriimino) trisbenzoic acid tris (2-ethylhexyl) ester |
| **Other names:** | Octyl triazone; UVT-150 |
| **Molecular Formula:** | $C_{48}H_{66}N_6O_6$ |
| **Molecular Weight:** | 823.07 |
| **CAS No.:** | 88122-99-0 |
| **EINECS No.:** | 402-070-1 |

**Structural Formula:**



**UV Characteristics**




**Application**

Ethylhexyl Triazone is a highly effective UV-B filter with an exceptionally high absorptivity of over 1,500 at 314 nm. Because of its high A1/1 value, only small concentrations are required in cosmetic suncare preparations, to achieve a high SPF value. Concentrations up to 3% are recommended. Besides the polar nature of this product gives it good affinity to the keratin in the skin, so that formulations in which it is used are particularly water-resistant. This property is further enhanced by its complete insolubility in water. Ethylhexyl Triazone can crystallize after prolonged storage, as a result of supersaturation. Ethylhexyl Triazone has very good light stability. It remains practically unchanged, even when it is

exposed to intense radiation.

## Specifications

**Quality control data**
(Data which is used for quality release and is certified for each batch.)

| Test property | Specification | Remark |
|---|---|---|
| **Characters** | | |
| Appearance: | White to light yellow powder | |
| **Identification** | | |
| Identification (IR): | A. Infrared Absorption <197K> | |
| Identification (HPLC): | B. The retention time of the major peak in the chromatogram of the Assay preparation corresponds to that in the chromatogram of the Standard preparation, as obtained in the Assay. | |
| **Tests** | | |
| Melting point: | 128.0℃~132.0℃ | |
| Water: | Max. 0.5% | |
| Specific Extinction: (1%,1cm, at 314nm, in ethanol) | Min. 1500 | |
| Color: (Gardner ,100g/L in acetone) | Max. 2.0 | |
| **Assay** | | |
| Assay (HPLC): | 98.0%~103.0% | |
| Purity (HPLC): | Min. 99.0% | |
| **Impurities** | | |
| Total Impurities: | Max. 1.0% | |
| Individual Impurity: | Max. 0.5% | |
| **Residual Solvents** (GC): | Conform | |

**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 |
| **Pathogens** | |

| Test property | Specification |
|---|---|
| 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.

## Storage information

**Packaging Information**
25kgs/carton.

**Shelf life**
24 months, in original, unopened containers.

**Storage conditions**
Preserve in well-closed containers. Store at room temperature.

**Additional information**
None.

## Disclaimer