UVASIL 299HM / 299LM
HINDERED AMINE STABILIZER

Uvasil 299 is a Hindered Amine Light Stabilizer (HALS) that protects organic polymers against the degradation caused by exposure to ultraviolet radiation.

![Chemical Structure](image)

Polymer
Additives

The unique molecular structure of Uvasil 299, consisting of a silicon backbone with tetramethyl piperidine sidechains, offers powerful UV-protection and good compatibility with many leading polymers. Uvasil 299 is especially effective in polypropylene, but it is also suitable for other polymers including polystyrene, polyester, ABS, HDPE, polyamides and TPU. It can be used in conjunction with other light stabilizers, phenolic antioxidants, organophosphites or phosphonites and other common lubricants and antistatics. It provides excellent resistance to water extraction and continues to protect oligomeric products after washing or dry cleaning. Uvasil 299 offers outstanding activity under extreme conditions in both thin and thick articles.

Features Include:
- Low volatility guarantees virtually no weight loss up to 300°C in nitrogen or in air.
- Optimal migration rate ensures outstanding performance in both thin and thick section polymeric products.
- Excellent resistance to water extraction continues to protect oligomeric products after washing or dry cleaning.
- Outstanding activity under extreme conditions.
- Highly cost effective
- Molecular weight regulation allows maximization of effectiveness in different types of applications (thick and thin sections).
- FDA compliant for use in polypropylene homopolymer up to 0.33% by weight under 21 CFR § 177.2010
Uvasil 299

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<td>Molecular Weight (Average)</td>
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<td>Relative density (20°C)</td>
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- **Viscosity (Mn = 1800)**
  - Temperature, °C: 25°C, 50°C, 75°C
  - Viscosity, Pas: 20.0, 1.9, 0.7

- **Thermogravimetric Analysis (10 mg @ 10 °C/minute under nitrogen)**
  - Weight Loss, %: 5, 10, 25
  - Temperature, °C: 290, 308, 342

- **Solubility @ 20°C (Weight %)**
  - Methanol: Miscible
  - Chloroform: Miscible
  - N-Heptane: Miscible
  - Toluene: Miscible
  - Ethyl-acetate: Miscible
  - Water: Practically insoluble

The use of proper protective equipment is recommended. Excess exposure to the product should be avoided. Wash thoroughly after handling. Store the product in a cool, dry, well-ventilated area away from incompatible materials. Unless stated, proper storage will permit usage of the product for 6 to 12 months from the date of receipt. Oral toxicity: LD₅₀ (rats) >699.0 mg/kg; Dermal toxicity: LD₅₀ (skin-rats) = 1961 mg/kg. For additional handling and toxicological information, consult GLCC Material Safety Data Sheet 00076.

This product is packaged in 55 lb. drums.