SHEET



Introduction

Chiguard® 101 is a liquid hinder amine type light stabilizer based on alkoxyamine technology, featuring low basicity and high efficiency.

This acid resistant HALS is very efficient because it can directly enter the HALS stabilization cycle, providing excellent UV/thermal/chemical resistance, light transmission and durability.

Furthermore, low basicity makes Chiguard® 101 suitable in acid catalyzed systems and in coatings using acidic pigments.

Application

Chiguard® 101 is effective in thermosetting systems such as traditional acid catalyzed automotive coatings, refinish paints, etc. because of its low basicity.

Chiguard[®] 101 is also widely used to improve weathering performance of various polymers and applications, especially under critical conditions when in contact with aggressive media including acids, flame retardants, sulfur, and catalyst residues. Its liquid form provides easy handling and incorporation as well as dosing accuracy.

Chemical Information

Structure

$$C_{e}H_{17}-O-N$$
 $O-III_{O}C_{e}H_{16}$
 $O-III_{O}C_{e}H_{17}$

Chemical name

Decanedioic acid, bis(2,2,6,6-tetramethyl-1-(octyloxy)-4-piperidinyl) ester

Molecular weight 737 (average)

Physical Data

Boiling point : Start of decomposition

230 °C

Specific gravity : 0.97 @ 20 °C

Vapor pressure : 0.00036 Pa @ 25 °C

Flash point : 95 °C (closed up)

Specification

Appearance : Light yellow liquid

Assay : 96% min.

Volatiles : 1% max.

Clarity of solution : Clear

Transmittance : 95% min. @ 425nm

96% min. @ 450nm 97% min. @ 500nm

Solubility (g in 100ml solvent @ 20 °C)

Butanol : > 50
Butyl acetate : > 50
Ethyl glycol : > 50
MEK : > 50

Water : < 6 ppm @ 20 °C