

NAUGARD™ 412S thioester

Thioester Stabilizer

Description

NAUGARD™ 412S thioester is a low-volatility, high molecular weight, organic sulfur-containing antioxidant developed for polyolefins and engineering thermoplastics. It is specifically recommended for high-temperature, long-term applications for polypropylene, polyethylene and engineering thermoplastics. When **NAUGARD™ 412S thioester** is used in conjunction with a primary hindered phenolic antioxidant, the combination provides thermal stability that is not obtainable with conventional thioesters.

Features

- Excellent long-term heat stabilizer
- Low odor
- Low plate-out

Chemical Name

Pentaerythritol tetrakis (β-laurylthiopropionate)

CAS-Number:

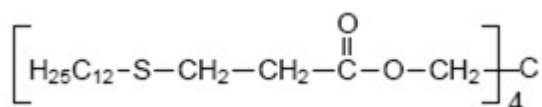
29598-76-3

EINECS-Number:

249-720-9

Formula

NAUGARD™ 412S thioester



Typical physical properties of NAUGARD™ 412S thioester

Appearance	White, crystalline powder and pellets
Molecular weight [g/mol]	1162
Melting Point	47°C
Specific Gravity @ 55°C	0.93
Bulk Density [g/cc]	0.52

Solubility (g/100ml solvent)

Acetone	2.5
Benzene	83
N-Hexane	20.7
Methanol	<0.01
Water	<0.01

Thermogravimetric Analyses (10 mg @ 10°C/minutes under N₂)

TGA 5%	TGA 10%	TGA 50%
	331°C	374°C

Storage and Handling

This product may be stored for at least four (4) years in sealed containers. Containers should be stored in cool, dry area. Extended storage at elevated temperatures or exposure to direct heat could decrease product shelf life. Containers should be kept sealed when not in use.

For additional handling and toxicological information consult the SI Group Material Safety Data Sheet.