

# QUALITY PROTECTS.

**QUALITY WORKS.**

**LANXESS**  
Energizing Chemistry

## Naugalube® AMS

### Di- $\alpha$ -methylstyryl diphenylamine antioxidant

Naugalube® AMS is a high molecular weight solid antioxidant which provides excellent oxidative stability to both mineral and synthetic based formulations. Its features include low volatility and high purity.

Due to its high thermal stability, Naugalube® AMS is typically recommended for higher temperature applications which include marine diesel engine oils, industrial oils and grease.

It is a solid antioxidant typically used at treat levels between 0.05% and 1.0%.

Naugalube® AMS can also be used in combination with other alkylated diphenylamines, hindered phenolics and/or secondary peroxide decomposer antioxidants, as well as appropriate metal deactivators, for enhanced performance.

#### Applications

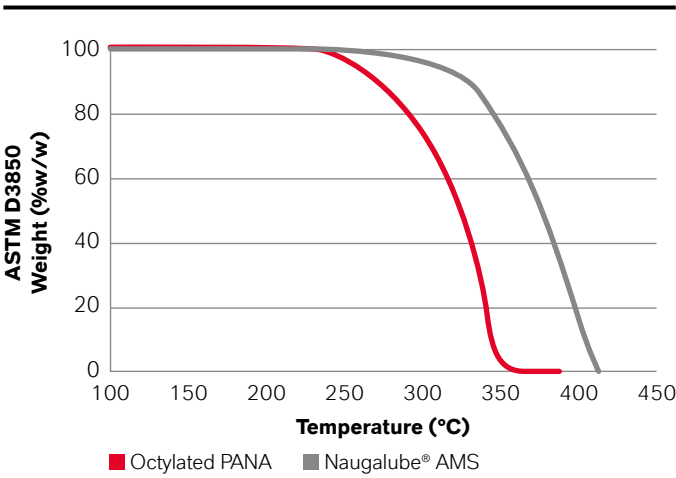
Industrial						Marine		Aviation		Automotive				Grease		
Gear oil	Turbine oil	Hydraulic oil	Heat transfer oil	Chain oil	Compressor oil	Trunk piston engine oil	System oil	Turbine oil	Hydraulic oil	Gasoline engine oil	Diesel engine oil	Auto transmission fluid (ATF)	Differential fluid	Automotive grease	Industrial grease	Aviation grease
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

■ Primary recommendation   ■ Alternative recommendation

**X Naugalube® AMS**

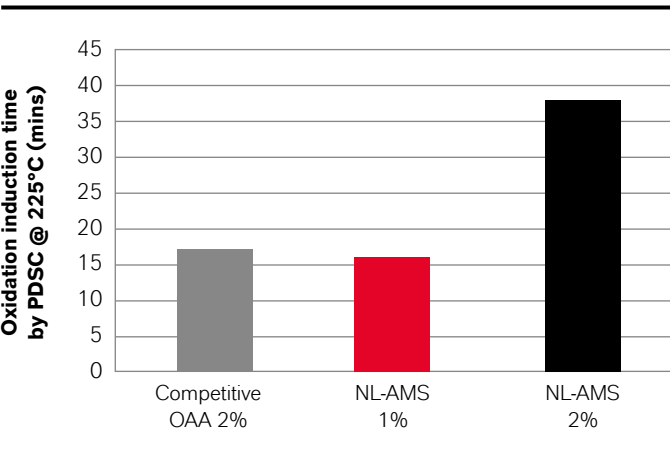
Features	Benefits
Ashless antioxidant	Supports formulators in the drive for lower ash products
High molecular weight antioxidant	Low antioxidant volatility providing for prolonged presence in finished formulations
Excellent thermal stability	Reduced oil oxidation and deposits, excellent for high temperature applications
Low color	Little to no initial discoloration to finished lubricants

**TGA profile of Naugalube® AMS**



Additive volatility can influence lubricant performance characteristics. Thermogravimetric analysis (TGA) of Naugalube® AMS demonstrates its excellent thermal and oxidative stability.

**Oxidation stability by PDSC – aviation turbine oil**



The above pressure differential scanning calorimetry data demonstrates the superior resistance to oxidation of a fully formulated Group V aviation turbine oil containing Naugalube® AMS as compared to the same oil containing competitive oligomeric aromatic amines.

**Shipping information: 25 kg bags**



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