# QUALITY PROTECTS.

## QUALITY WORKS. LANXESS

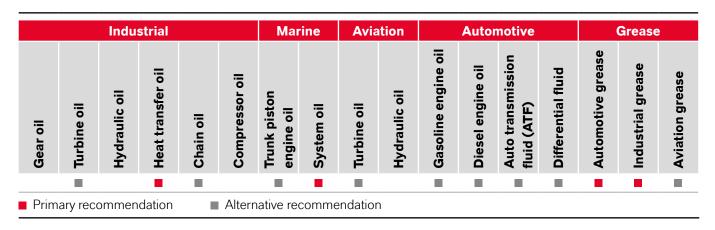
### Naugalube<sup>®</sup> AMS Di-α-methylstyryl diphenylamine antioxidant

Naugalube<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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.

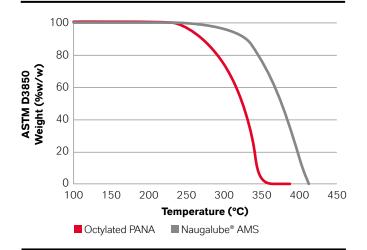
#### Applications





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.

#### Shipping information: 25 kg bags

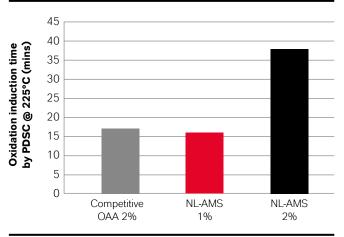


LANXESS Deutschland GmbH Business Unit Lubricant Additives Kennedyplatz 1 50569 Cologne, Germany

Customers in the USA are kindly requested to refer to: LANXESS Corporation Business Unit Additives 2 Armstrong Road Shelton, CT 06484, USA Tel: +1-203-573-2000

lubricant.additives@lanxess.com http://lab.lanxess.com

#### **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<sup>®</sup> AMS as compared to the same oil containing competitive oligomeric aromatic amines.

This information and our technical advice – whether verbal, in writing or by way of trials – is subject to change without notice and given in good faith but without warranty or guarantee, express or implied, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided – especially that contained in our safety data and technical information sheets – and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.

Unless specified to the contrary, the values given have been established on standardized test specimens. The figures should be regarded as guide values only and not as binding minimum values. Kindly note that the results refer exclusively to the specimens tested. Under certain conditions, the test results established can be affected to a considerable extent by the processing conditions and manufacturing process.

#### ©2020 LANXESS

Naugalube®, LANXESS and the LANXESS Logo are trademarks of LANXESS Deutschland GmbH or its affiliates. All trademarks are registered in many countries in the world.