

Vanderbilt Chemicals, LLC; provides a variety of unique additives to formulators across all segments of lubrication. This brochure provides information on a new antioxidant commercialized in 2016, **VANLUBE® 407 Lubricant Additive**.

INTRODUCING VANLUBE® 407

VANLUBE® 407 is a new liquid proprietary antioxidant. This unique product provides exceptional antioxidant performance in PDSC (ASTM D6186) and RPVOT (ASTM D2272) at very low treat rates and low costs. **VANLUBE® 407** has USDA HX-1 approval by NSF for use in food grade lubricants and also carries kosher approval.

TYPICAL PROPERTIES

PROPERTY	RESULT
Nitrogen, %	6.2
Sulfur, %	15.8
Density at 25 °C, Mg/m ³	1.02
Flash Point, °C, (ASTM D6450)	212
Moisture, %	0.02
Viscosity @ 100 °C, mm ² /s	23.7

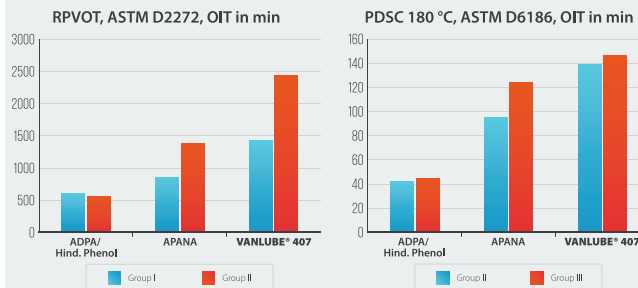
KEY ADVANTAGES

- **Powerful antioxidant for boosting RPVOT and PDSC performance**
- **Cost savings**
- **Liquid product / simple to handle**
- **Great stability / solubility**
- **NSF and kosher approval**
- **High concentration of active ingredients**
- **Global registration**

PERFORMANCE

Turbine Oil

Antioxidant Performance Comparison

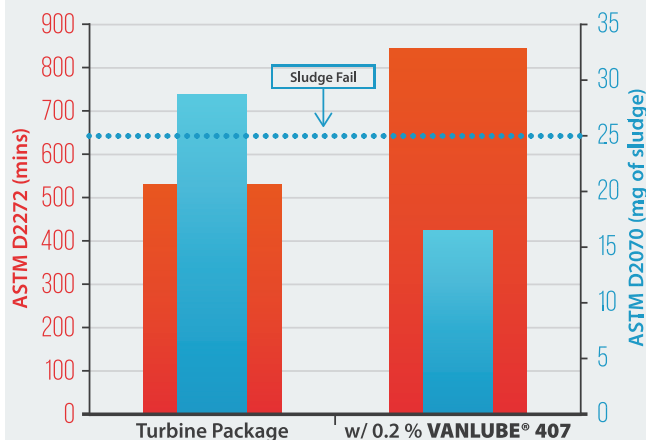


0.1 % rust inhibitor, 0.05 % corrosion inhibitor, 0.5 % antioxidant

When used in Group I, II and III oils, **VANLUBE® 407** provides outstanding PDSC and RPVOT results compared to other antioxidants.

Improve Oxidation Control while Reducing Sludge

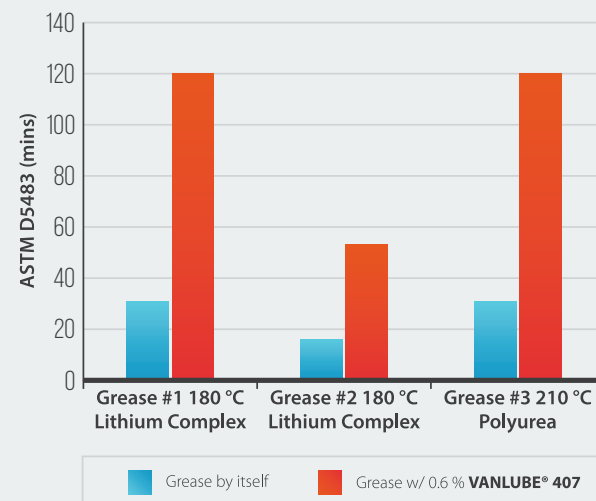
Improve Oxidation Control while Reducing Sludge



VANLUBE® 407 as a top treat to a conventional turbine package, at just 0.2 % treat rate in a Group II ISO 32 base oil, can improve oxidation control in RPVOT while reducing sludge.

Grease

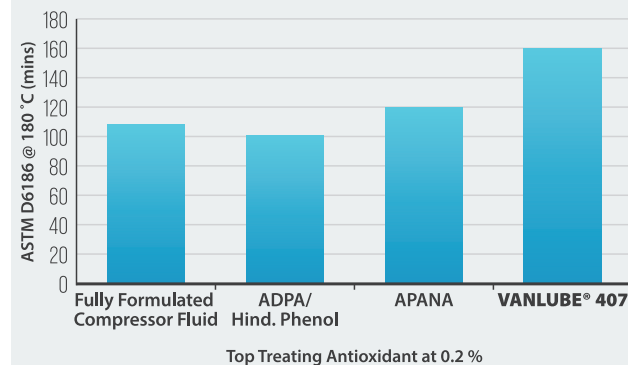
VANLUBE® 407 PDSC Performance in Commercial Grease



Adding **VANLUBE® 407** at 0.6 % to three commercial greases with different thickeners significantly raises the PDSC results at various temperatures.

Compressor Oil

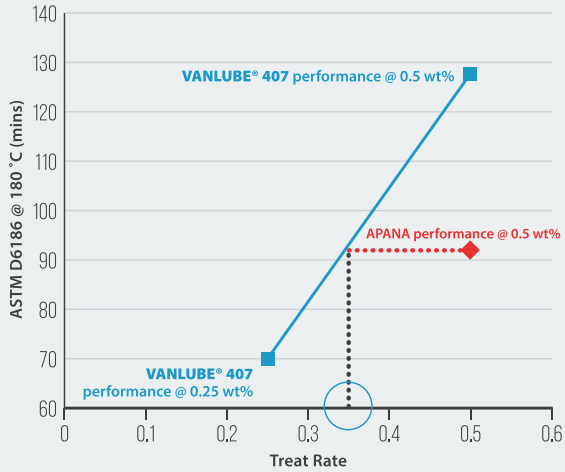
Group V Based Compressor Oil Top Treated with VANLUBE® 407



Adding **VANLUBE® 407** at 0.2 % in a Group V based commercial compressor oil raises the PDSC result by nearly an hour and performs better compared to other alternatives.

COST SAVINGS

VANLUBE® 407 vs. APANA in Group II ISO 32



*All formulations include 0.1 % rust inhibitor and 0.05 % corrosion inhibitor

VANLUBE® 407 may allow a 30 % treat rate reduction compared to APANA for equal performance in the PDSC oxidation test.

APPLICATIONS

TURBINE OIL

FOOD GRADE OIL

COMPRESSOR OIL

ENGINE OIL

GREASE

HYDRAULIC

Registered and pending trademarks appearing in these materials are those of Vanderbilt Chemicals, LLC. For a complete listing, please visit Trademark Listings at www.vanderbiltchemicals.com.

Vanderbilt Chemicals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.



CONTACT US



30 Winfield Street, P.O. Box 5150
Norwalk, CT 06856-5150



(203) 853-1400

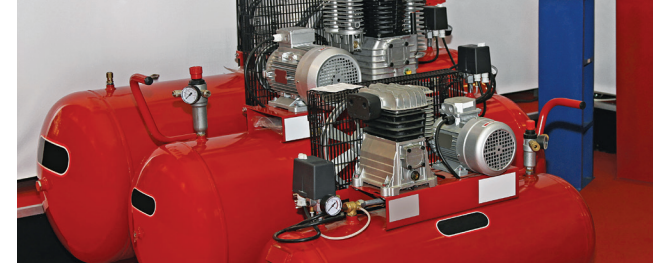


(203) 853-1452



www.vanderbiltchemicals.com

Before using, read, understand and comply with the information and precautions in the Safety Data Sheets, label and other product literature. The information presented herein, while not guaranteed, was prepared by technical personnel and, to the best of our knowledge and belief, is true and accurate as of the date hereof. No warranty, representation or guarantee, express or implied, is made regarding accuracy, performance, stability, reliability or use. This information is not intended to be all-inclusive, because the manner and conditions of use, handling, storage and other factors may involve other or additional safety or performance considerations. The user is responsible for determining the suitability of any material for a specific purpose and for adopting such safety precautions as may be required. Vanderbilt Chemicals, LLC does not warrant the results to be obtained in using any material, and disclaims all liability with respect to the use, handling or further processing of any such material. No suggestion for use is intended as, and nothing herein shall be construed as, a recommendation to infringe any existing patent, trademark or copyright or to violate any federal, state or local law or regulation.



INTRODUCING
VANLUBE® 407
LUBRICANT ADDITIVE



Vanderbilt Chemicals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.