

ROYCO® 555

SYNTHETIC HELICOPTER TRANSMISSION

ROYCO® 555 is an advanced 5 centistoke synthetic lubricating oil for gas turbine engines and helicopter transmissions. The product is a blend of “hindered” polyol esters and a finely balanced modern technology additive package resulting in enhanced load carrying performance, Antiwear, corrosion protection, and excellent thermal - oxidative stability.

APPLICATIONS

ROYCO® 555 was specifically developed for use in high performance gas turbine engines developed during the mid 1960's for the SST and Concorde. These advanced engines required a lubricant having good high temperature stability as well as extreme pressure load carrying capability. ROYCO® 555 was developed for the demands of increasingly higher power output engines that subsequently develop higher operating temperatures and loads.

ROYCO® 555 was also formulated to meet the requirements of helicopter gearbox and transmission systems. A high load carrying oil such as ROYCO® 555 is necessary to meet the load requirements and reliability demands of those systems. More recently with the need to transmit more power and higher loads through helicopter gearbox and transmission systems, extensive evaluation by helicopter airframe manufacturers has demonstrated this improved load carrying ability which has resulted in improved performance - particularly by increased time between overhaul (TBO.) This oil should only be used in applications where synthetic oils have been specified or in systems expressly designed for synthetic lubricants.

ROYCO® 555 should not be used with silicone-based elastomer.

APPROVALS AND SPECIFICATIONS

ROYCO® 500 meets all the requirements and is qualified under U.S. Military specification: DOD-PRF-85734A

PACKAGING

ROYCO® 555 is available in 55 gallon drums, 5 gallon pails, and 1 quart cans packed twenty-four to a carton.



TYPICAL PROPERTIES

PROPERTIES	TEST METHOD	ROYCO® 555
Kinematic Viscosity, cSt		
@ 100°C		5.27
@ 40°C	ASTM D445	26.7
@ -40°C		10,080
Flash Point, °C (°F)	ASTM D92	260 (500)
Fire Point, °C (°F)	ASTM D92	301 (575)
Pour Point, °C (°F)	ASTM D92	-57 (-71)
Neutralization No.	SAE-APR-5088	0.47
Evaporation, 400°F, 6.5 hours, % wt loss	ASTM D972B	3
Synthetic Rubber Swell "H" (72 hrs, 158°F), %		16.9
Synthetic Rubber Swell "F" (72 hrs, 400°F), %	FTM 3604	13.8
Thermal Stability and Corrosivity (96 hrs, 525 °F)		
Viscosity; @ 40°C, % Change		1.18
Acid Number Change, mg KOH/g	FTM 3411	1.75
Metal Weight Change, mg/cm²		0.39
Oxidation and Corrosion Stability (72 hrs, 400 °F)		
Iron, wt. change, mg/cm²		0.01
Silver, wt. change, mg/cm²		0.02
Aluminium, wt. change, mg/cm²		0.01
Magnesium, wt. change, mg/cm²	FTM 5308	0.05
Copper, wt. change, mg/cm²		0.04
Viscosity Change @ 40°C, %		19.8
Acid Number Change		0.6
Contamination, mg/100 ml		0.9
Sediment, 1.2 micron filter, mg/L		1.6
Foaming, ml initial/ml final		
Sequence I, Sequence II, Sequence III	ASTM D892	4/0, 0/0, 4/0
Density, pounds per gallon		8.27



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.

©2017 LANXESS and the LANXESS Logo are trademarks of LANXESS Deutschland GmbH or its affiliates. All trademarks are registered in many countries in the world.

North America

+1.833.LANXESS
customer.care@lanxess.com

Europe, Middle East & Africa

+44.161.875.3800
emea.export@lanxess.com

South & Central America

+55.19.3522.5083
atendimento.cliente@lanxess.com

Asia Pacific

+86.21.6109.6666
Orders.apac@lanxess.com

