



# Royal Lubricants, Inc.

Product Bulletin  
MIL-DTL-17111C

## ROYCO 717 POWER TRANSMISSION FLUID

### DESCRIPTION:

ROYCO 717 is a pale straw - colored hydraulic fluid blended with highly refined mineral based oils and modern additive technology to provide protection against rust, wear, demulsibility, and to afford greatly improved viscosity - temperature characteristics as well as enhanced oxidation – corrosion resistance.

### APPLICATIONS:

ROYCO 717 is recommended for use in applications requiring a constant source of fluid power to hydraulic components - particularly in naval ordnance equipment. ROYCO 717 affords rust, corrosion, and antiwear protection in high humidity and salt-water environs over wide latitude of ambient temperatures. Its excellent emulsion stability enables full power operation even under conditions of moderate water contamination.

### LIMITATIONS:

ROYCO 717 is **not** recommended for use in aircraft hydraulic systems or in systems operating below -35 °C.

### PACKAGING:

ROYCO 717 is available in 5-gallon pails and 55-gallon drums. Other packages may be available on special request.

### SPECIFICATIONS:

ROYCO 717 meets all requirements and is qualified to MIL-SPEC: MIL-DTL-17111C.

**ROYCO 717**

**For more information please refer to the relevant Material Safety Data Sheet accompanying each product.**

**Warranty:** All products purchased from Royal are subject to terms and conditions set out in the contract, order acknowledgement and/or bill of lading. Royal warrants only that its product will meet those specifications designated as such herein or in other publications. All other information supplied by Royal is considered accurate but is furnished on the expressed condition that the customer shall make its own assessment to determine the product's suitability for a particular purpose. No warranty is expressed or implied regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such other information or product will not infringe any patent.

PROPERTY	TYPICAL
Kinematic Viscosity, cSt	
@ 100°C	10.1
@ 40°C	29.3
@ -20°C	312
@ -35°C	870
Viscosity Index	360
Pour Point, °C	<-55
Flash Point, °C	112
Fire Point, °C	120
Neutralization No., mq KOH/g	0.10
Water Content, %	0.05
Specific Gravity, g/cc, 15.6°C	0.879
Color, ASTM D-1500	0.75
Low Temperature Stability, -35°C/72 hrs.	Stable, no gel/separation
Rust Protection, ASTM D-665A	PASS
Corrosion and Oxidation Stability, 336 hrs. @ 93°C	
Corrosion stability: Cu Wt. loss $\leq$ 0.2 mg/cm <sup>2</sup>	PASS
no pitting or etching	
Oxidation stability: Viscosity change $\leq$ 25%	PASS
Neutralization number mq/KOH	$\leq$ 0.5
Shear Stability: 30 minutes sonic oscillation (equiv. To 5000 cycles in hydraulic apparatus) Viscosity incr. < 20%	PASS
Emulsion Stability/ Water Sludging:	PASS
Viscosity of emulsion, $\geq$ -2% and $\leq$ 10%	PASS

R717: 11/30/01



**Royal Lubricants, Inc.**

PO Box 518, 215 Merry Lane  
East Hanover, New Jersey USA

Tel: 8000989-ROYAL

In NJ (973) 887-7410

Fax: (973) 887-6930

E-mail: [info@royallube.com](mailto:info@royallube.com)