Product Data

Brayco 717

Fluid, Transmission Power

Description

Castrol Brayco™ 717 is a straw-colored, medium viscosity hydraulic fluid. It is a blend of highly refined petroleum basestocks and additives, which provide resistance to oxidation and corrosion, anti-wear properties and a high viscosity index.

Application

Brayco 717 is designed for the hydraulic transmission of power in Naval ordinance hydraulic equipment. It provides corrosion protection in the presence of salt water and spray.

It can be used over an operating temperature range of -40ºC to 122ºC (-40ºF to 250ºF) and meets the requirements of military specification MIL-DTL-17111E which requires first article testing rather than formal qualification and approval.

This fluid is identified by NATO Code Number H-575.

Typical Characteristics

Name	Method	Units	MIL-DTL-17111E specification	Brayco 717
Base fluid				
Acid Number	ISO 6618 / ASTM D974	mg KOH/g	0.05 max.	0.01
Aniline Point change	ISO 2977 / ASTM D611	°C	2.8 max.	0.6
Precipitation Number	ASTM D91	-	0.05 max.	0.02
Aniline Point	ISO 2977 / ASTM D611	°C	77 min.	83.4
Finished Product				
API Gravity	ASTM D287	-	30-33 typical	30.9
Specific Gravity @ 15°C / 59°F	ISO 3675 / ASTM D1298	-	0.859-0.875 typical	0.871
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m³	-	724
Kinematic Viscosity @ -35°C / -31°F	ISO 3104 / ASTM D445	mm²/s	1000 max.	828
Kinematic Viscosity @ -20°C / -4°F	ISO 3104 / ASTM D445	mm²/s	500 max.	278
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm²/s	25 min.	26.4
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm²/s	8 min.	8.8
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	104 / 220 min.	110 / 230
Fire Point	ISO 2592 / ASTM D92	°C/°F	113 / 235 min.	118 / 245
Acid Number	ISO 6618 / ASTM D974	mg KOH/g	0.3 max.	0.1
Precipitation Number	ASTM D91	-	0.05 max.	0
Water Content - Dean-Stark distillation test	ISO 3733 / ASTM D95	%wt	0.0 max.	0
Colour	ASTM D1500	-	2 max.	<1
Low Temperature Turbidity (72 hrs @ -37°C / -35°F)	MIL-DTL-17111E spec 4.5.3.2	Pass	Pass	Pass
Rust test - distilled water (24 hrs)	ISO 7120 / ASTM D665A	-	Pass	Pass
Corrosion & Oxidation Stability - 72 hrs @ 93.3°C / 201°F: Change in Viscosity @ 100°C / 212°F Change in Viscosity @ -20°C / -4°F Acid Number - Oil Layer Acid Number - Water Layer Loss of liquid	MIL-DTL-17111E spec 4.5.3.4.2	 % % mgKOH/g mgKOH/g g	 0 to 15 0 to 15 0.5 max. 0.5 max. 10 max.	 4.4 24.5 0.08 0 2.6
Evaporation Loss	ASTM D972	% wt	20 max.	7.1
Water Sludging tendency @ 38°C	MIL-DTL-17111E spec 4.5.3.5	% Viscosity change	-2 to 10	8.1
Workmanship	MIL-DTL-17111E spec 3.2.5	Pass	Pass	Pass

Subject to usual manufacturing tolerances.

Brayco 717
02 Nov 2012

Castrol Industrial, Technology Centre , Whitchurch Hill , Pangbourne , Reading , RG8 7QR , United Kingdom

www.castrol.com/industrial