



# Tribol™ GR 215-2

Low Friction, Anti-wear Clean room Grade Grease

# Description

Castrol Tribol<sup>™</sup> GR 215-2 (previously called Optitool<sup>™</sup> 215-2) is a smooth, off-white fully synthetic NLGI 2 grade grease based upon specially selected raw materials and a proprietary thickener. This product was specifically designed for use in micro-electronic and clean room applications, which are sensitive to metallic elements and other contaminants. Tribol GR 215-2 uses no ingredients containing lithium, molybdenum, calcium, aluminum, barium, zinc or sodium as standard elements. These elements are typically found in other greases and may be contained in relatively high concentration.

Tribol GR 215-2 provides outstanding low friction and anti-wear properties making it ideal for use in all precision requirements and applications which require exceptional lubricity.

# Application

Tribol GR 215-2 is intended for use on ball, roller, and needle bearings, linear motion components, carriages, lead screws, gears, sliding and roller surfaces, instruments and precision equipment.

### **Conditions of Use**

Temperature Range: -40°F to 302°F (-40°C to 150°C)

# **Typical Characteristics**

Name	Method	Units	Tribol GR 215-2
Appearance	Visual	-	smooth and homogenous
Penetration @ 77°F Worked	ASTM D 1403	0.1mm	272
Unworked		0	276
Oil Separation (149°C, 30 hours)	FTM 791 (321)	% loss	2.65
Four Ball Wear Test – scar diameter 1200 RPM, 75°C, 40 kg, 1 hr	ASTM D 2266	mm	0.48
Four Ball EP			
Weld Load Load Wear Index	ASTM D2596	kg	126 31.8
Evaporation Loss (8 hrs @ 149°C)	ASTM D 2595	%	0.12
Copper Corrosion Test	ASTM D 4048	-	1b
Dropping Point	ASTM D 2265	°C / °F	292 / 558
Specific Gravity @ 16°C	ASTM D 287	-	0.87
Low Temperature Torque @ -40°C			
Starting Running 1 hr	ASTM D 1478	g/cm	2652 754
SRV (300N, 1 hr, 50°C, 1 mm, 50 Hz)			
Coefficient of Friction @ 1 hour		-	0.11
Ball Scar Diameter	ASTM 5607 (mod)	mm	0.45
Disc Scar Area		µm2	154
Disc Scar Depth		μm	0.76
Oxidation Stability, Pressure Drop (100 hrs @ 99°C)	ASTM D 942	psi	0.5
Rust Test	ASTM D1743	-	Pass

Subject to usual manufacturing tolerances.

# **Additional Information**

Tribol GR 215-2 is compatible with many lubricants but certain adverse reactions can occur when mixing greases. Mixing of incompatible greases can cause failure and/or decreased performance in certain applications. Before use in any system, consult with your Castrol advisor for compatibility information regarding your specific application and existing grease.

#### This product was previously called Optitool 215-2. The name was changed in 2015.

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