Technical Data



Performance you can trust

SAPPHIRE® 2, 1, 000

Triple life multi-purpose bearing grease

Product Overview

ROCOL® SAPPHIRE 2, 1 & 000 heavy duty bearing greases are designed for the effective lubrication and protection of all types of ball, roller and plain bearings.

SAPPHIRE 2 is designed for normal use typically applied by greasegun or keg pump.

SAPPHIRE 1 is a slightly softer version for easier pumpability particularly when greasing is carried out via remote pipework.

SAPPHIRE 000 is a semi fluid version specifically developed for use in centralised lubrication systems, where very long pipe runs are inevitable and in grease filled gearboxes.

Features and Benefits

- Excellent temperature resistance from -30°C to +150°C.
- Revolutionary multi-complex soap technology provides outstanding EP performance superior to conventional soap thickened lubricants.
- SAPPHIRE 2, 1 & 000 are highly resistant to oxidation providing greatly extended lubrication intervals - typically 3 times longer than conventional lubricants.
- Excellent corrosion resistance to protect in humid, damp and even wet conditions.
- Highly tenacious lubricants, with outstanding film strength, ensure the lubricants remain in place even in severe operating conditions.
- SAPPHIRE 2, 1 & 000 maintain their integrity in extreme conditions and continue to protect over extended lubrication intervals. reducing equipment failure, downtime and lubricant usage.
- Blue in colour for high visibility in use.

Directions for Storage and Use

- SAPPHIRE 2 & SAPPHIRE 1 Apply manually, by grease gun or by other methods suitable for the NLGI grade of grease being used.
- SAPPHIRE 000 fill reservoir or gearbox to the level recommended by equipment manufacturer.
- All grades are compatible with other soap thickened greases. However, for best results the previous lubricant should be removed prior to application.
- The storage temperature should be controlled between +1°C and +40°C.
- Shelf life is 3 years from date of manufacture.

Typical Applications

SAPPHIRE 2, 1 & 000 are designed for medium to heavy duty ball, roller and plain bearings. They are ideal for use in slower moving bearings operating under extreme conditions such as shock loads and wet environments found in all types of industrial applications.

SAPPHIRE 1 is particularly suitable for centralised lubrication systems greasing via long pipe runs.

SAPPHIRE 000 is designed particularly where centralised lubrication systems are used such as commercial vehicles heavy plant and other industrial applications. SAPPHIRE 000 is also ideal for use in grease filled gearboxes.

Pack Sizes

SAPPHIRE:	2	1	000	
400g cartridge	12171	12601	-	
5kg	12176	12606	12276	
18kg	12175	12614	12284	
50kg	12178	12608	-	
185kg	12179	12609	-	

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Property	Test Method	Result		
Appearance	Visual	Smooth blue grease		
SAPPHIRE 2 NLGI No.	IP 50 - ASTM D217	2		
SAPPHIRE 1 NLGI No.	IP 50 - ASTM D217	1		
SAPPHIRE 000 NLGI No.	IP 50 - ASTM D217	000		
Base Type	N/A	Severely refined mineral oil		
Base Fluid Viscosity at 40°C	IP 71	180cSt		
Base Fluid Viscosity at 100°C	IP 71	17cSt		
Thickener	N/A	Multi-complex soap technology		
Temperature Range	N/A	-30°C to +150°C		
4-Ball:		SAPPHIRE 2	SAPPHIRE 1	SAPPHIRE 000
Weld Load	IP239 - ASTM D2596	>800kg	> 800kg	>620kg
Mean Hertz Load	IP239 - ASTM D2596	120kg	120kg	65kg
Timken 'OK' Load	IP 326 - ASTM D2509	60 lb	60 lb	50 lb
Water Washout Test	IP 215 – ASTM D1264	2%	2%	N/A
Emcor Corrosion Test	IP 220	0:0	0:0	N/A
Copper Corrosion Test	IP 112 - ASTM D130	1a	1a	1a

Values quoted above are typical and do not constitute a specification.

Safety Data Sheets

Safety data sheets are available for download from our website www.rocol.com or may be obtained from your usual ROCOL contact.

The information in this publication is based on our experience and reports from customers. There are many factors outside our control or knowledge which affect the use and performance of our products, for which reason it is given without responsibility.

Issue: 1 Date: 01-11

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