

# Technical Data

## Sapphire® Extreme

### High Load, High Temperature Bearing Grease

#### Description

ROCOL® SAPPHIRE Extreme is a heavy duty, high temperature bearing grease fortified with molybdenum disulphide. It has been designed for the effective lubrication and protection of ball, roller and plain bearings used in extreme environments.

SAPPHIRE Extreme 2 combines the resilience of a clay thickener with the addition of molybdenum disulphide ensuring that a lubricating film exists under the most extreme loadings where the grease film can be squeezed out.

Capable of operating in extreme environments where high temperatures, shock loads, vibration and water are present.

#### Applications / Industries

- Ball Bearings
- Roller Bearings
- Plain Bearings
- Thrust Bearings
- Ovens / Furnaces
- Kilns
- Crushers
- Presses
- Scrapers
- Manufacturing
- Heavy Industry
- Docks and Ports
- Steelworks
- Quarries
- Mining
- Agriculture
- Construction

#### Features & Benefits

- Excellent high temperature resistance: -10°C to +235°C
- Non-melting grease
- Fortified with molybdenum disulphide (MoS<sub>2</sub>) which has a natural affinity to metal.
- Highly water resistant
- Excellent corrosion resistance
- High load carrying film, ideal where shock loads or vibration can occur
- Reduces frictional heat and wear extending equipment life
- Highly resistant to oxidation providing extended lubrication intervals
- Excellent corrosion resistance protecting in humid, wet conditions.
- Highly tenacious lubricant with outstanding film strength ensuring the lubricants remain in place even in severe operating conditions.

#### Directions For Use

SAPPHIRE Extreme can be applied manually, by a grease gun or keg pump.

For best practice the storage temperature should be kept between 0°C and 40°C.

Shelf life is 3 years from date of manufacture.

Avoid mixing with soap greases

#### Further Information

For pack sizes, part codes and safety data sheets please visit [www.rocol.com](http://www.rocol.com) or get in touch with our customer service team who will be happy to help: [customer.service@rocol.com](mailto:customer.service@rocol.com)

# Technical Data

## Sapphire® Extreme

### High Load, High Temperature Bearing Grease

Property	Test Method	Result
Appearance	Visual	Smooth blue / black grease
NLGI No.	IP 50 – ASTM D217	2
Base Type	N/A	Semi-synthetic
Base Fluid Viscosity at 40°C	IP 71	200cSt
Base Fluid Viscosity at 100°C	IP 71	20cSt
Thickener	N/A	Organically modified clay
Solids	N/A	Molybdenum disulphide
Temperature Range - Upper Limit	N/A	-10°C to + 235°C
Temperature Range - Short Periods	N/A	Up to +250°C
4-Ball Weld Load	IP 239 – ASTM D2596	280kg
4-Ball Mean Hertz Load	IP 239 – ASTM D2596	50kg
Oil Separation 24 hrs at +100°C	IP 121	5% maximum
Water Washout Test	IP 215 – ASTM D1264	0%
Emcor Corrosion Test	IP 220	0:0
Corrosion Test:		
24 hrs at +100°C Copper	IP 112 – ASTM D130	1a
Corrosion Test - Mild Steel	24 hrs at 100°C	No stain
Corrosion Test - Aluminium	24 hrs at 100°C	No stain

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

Issue 3 Date: 12/20

T +44 (0) 113 232 2600 F +44 (0) 113 232 2740  
E customer.service@rocol.com [www.rocol.com](http://www.rocol.com)  
ROCOL House, Swillington, Leeds LS26 8BS

This document contains information based on data that is believed to be correct. However, the product may not be applicable to all uses and operating environments. No warranty or guarantee is expressed or implied.

ROCOL® A division of **ITW** Ltd

