

## SAPPHIRE® Hi-Speed 2

High speed, low noise, bearing grease

### Product Overview

ROCOL® SAPPHIRE Hi-Speed 2 is specifically designed for the effective lubrication and protection of all types of bearings where an extreme high speed, low noise, grease is required. Particularly where bearings require grease with a dmN factor of 1 million or more.

SAPPHIRE Hi-Speed 2 provides an economical method of achieving minimal lubrication and maintenance free operation over long periods, without the need for oil mist or other external lubrication systems.

SAPPHIRE Hi-Speed 2 permits the use of simple closures and provides some degree of protection against the ingress of contaminants.

### Features and Benefits

- SAPPHIRE Hi-Speed 2 has a wide temperature resistance – ranging from -40°C to +120°C.
- SAPPHIRE Hi-Speed 2 is excellent for use at high speeds with a speed rating of  $1.25 \times 10^6$  (1,250,000) dmN.
- SAPPHIRE Hi-Speed 2 has good anti-wear performance with a weld load of 200kg.
- SAPPHIRE Hi-Speed 2 provides a long lasting lubricant film even at extreme high speeds and eliminates the need for an external oil lubrication system.
- SAPPHIRE Hi-Speed 2 is designed to be a low noise grease which is ideal when used in applications such as high speed spindles and other high speed applications found throughout industry.

### Directions for Storage and Use

- SAPPHIRE Hi-Speed 2 can be applied manually, by grease gun, keg pump or by other methods suitable for an NLGI No. 2 grease.
- SAPPHIRE Hi-Speed 2 is 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 Hi-Speed 2 is designed for ball and roller bearings found in all types of industrial applications, particularly those in extreme high speed situations.

SAPPHIRE Hi-Speed 2 is an excellent bearing grease for high speed spindles commonly found on machine tools such as CNC lathes, grinders and milling machines.

SAPPHIRE Hi-Speed 2 also excels in applications such as electric motor and fan bearings.

### Pack Sizes

Pack Size	Part Code
380g cartridge	12051
4.5kg	12056
18kg	12055

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Property	Test Method	Result
Appearance	Visual	Smooth brown grease
NLGI No.	IP 50 – ASTM D217	2
Base Type	N/A	Blend of synthetic fluids
Base Fluid Viscosity at 40°C	IP 71	11cSt
Base Fluid Viscosity at 100°C	IP 71	2.9cSt
Thickener	N/A	Lithium complex soap
dmN Factor	N/A	1,250.000 (1.25 x 10 <sup>6</sup> )
Temperature Range	N/A	-40°C to +120°C
4-Ball Weld Load	IP 239 – ASTM D2596	200kg
Water Washout Test	IP215 – ASTM D1264	2%
Corrosion Test - Emscor	IP 220	0:0
Oxidation Stability (drop in pressure)	IP 142 – ASTM D942	1.5psi

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](http://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.

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