Technical Data

Performance you can trust

TUFGEAR Universal

Heavy-duty open gear lubricant for demanding applications

Product Overview

ROCOL® TUFGEAR Universal is a heavy duty open gear grease containing a blend of high load carrying solids designed for the effective lubrication and protection of gears used in extreme environments.

TUFGEAR Universal is a highly water resistant, long life grease for the lubrication of all types and sizes of open gears.

TUFGEAR Universal can also be used as a heavy duty, highly adhesive, lubricant for the external protection of wire ropes in extreme, arduous conditions typically found in marine environments.

Also available in aerosol form – see ROCOL TUFGEAR Spray.

Features and Benefits

- ROCOL TUFGEAR Universal has a wide temperature range -40°C to +120°C.
- TUFGEAR Universal is a non-melting grease containing a blend of high load carrying solids.
- Combination of high load carrying solids boosts the heavy duty performance particularly in highly loaded applications.
- TUFGEAR Universal demonstrates outstanding EP performance with a weld load of 800 kg.
- TUFGEAR Universal has excellent corrosion resistance to protect in humid, damp and even wet conditions.
- It is highly tenacious ensuring that the lubricant adheres to the gear teeth and does not fling off.
- TUFGEAR Universal maintains integrity in extreme conditions and continues to protect over extended lubrication intervals, reducing equipment failure, downtime and lubricant usage.

Directions for Storage and Use

- Apply manually directly to clean and dry gear teeth.
- Use a stiff brush or the 400 g cartridge in a suitable applicator.
- Also available as TUFGEAR Spray for application by aerosol.
- The storage temperature should be controlled between +1°C and +40°C
- Shelf life is 4 years from date of manufacture.

Typical Applications

- TUFGEAR Universal is designed for open gears, girth gears, rack and pinions etc. which are found in all types of industrial applications.
- TUFGEAR Universal has been developed to use on all types and sizes of open gears in aggressive environments, including strong underwater currents.
- TUFGEAR Universal is used for large gears operating under high loads in extreme conditions.
- NATO Stock Number: 9150 99 701-3540 (5kg)
- NATO Stock Number: 9150 99 396-0031 (18kg)

Pack Sizes

Pack Size	Part Code
400g cartridge	18302
5kg	18305
18kg	18304

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

Registered Company No. 559693 VAT No. 742 0531 67
Registered Office: Admiral House, St Leonard's Road, Windsor, Berkshire SL4 3BL

ROCOL A division of ITW Ltd

BS EN ISO 9001 Certificate No. FM 12448
BS EN ISO 14001 Certificate No. EMS 67596
OHSAS 18001 Certificate No. OHS 78173

INVESTORS IN PEOPLE

TUFGEAR Universal

Heavy-duty open gear lubricant for demanding applications

Property	Test Method	Result
Appearance	Visual	Smooth black adhesive grease
NLGI No.	IP 50 – ASTM D217	2
Base Type	N/A	Blend of high viscosity mineral oils
Base Fluid Viscosity at 40°C	IP 71	>1000cSt
Thickener	N/A	Organically modified clay
Solids	N/A	Blend of high load carrying solids
Temperature Range	N/A	-40°C to +120°C
4-Ball Weld Load	IP 239 – ASTM D2596	800kg
4-Ball Mean Hertz Load	IP 239 – ASTM D2596	120kg
Timken 'OK' Load	IP 326 – ASTM D2509	35 lbs
Mild Steel Corrosion Test 24 hrs at 100°C	N/A	No stain
Shear Stability – Roll Stability Change in Worked Penetration at 25°C	ASTM D1831	+20
Copper Corrosion Test	IP 112 – ASTM D130	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: 2 Date: 10-13

T +44 (0) 113 232 2600
F +44 (0) 113 232 2740
E customer-service@rocol.com
www.rocol.com
ROCOL House, Swillington, Leeds LS26 8BS
Registered Company No. 559693 VAT No. 742 0531 67
Registered Office: Admiral House, St Leonard's Road, Windsor, Berkshire SL4 3BL

ROCOL A division of ITW Ltd

BS EN ISO 9001 Certificate No. FM 12448
BS EN ISO 14001 Certificate No. EMS 67596
OHSAS 18001 Certificate No. OHS 78173
INVESTORS IN PEOPLE