Technical Data



Performance you can trust

FOODLUBE® Hi-Torque (with SUPS)



High performance, food grade, synthetic gearbox fluids Viscosity grades: ISO VG 150, 220, 320, 460

Product Overview

The ROCOL® FOODLUBE Hi-Torque range of nontoxic gearbox lubricants are supplied in viscosity grades: ISO VG 150, 220, 320 & 460.

The majority of wear in a gearbox occurs on start up and the high performance FOODLUBE Hi-Torque gear oils are reinforced with a unique Start Up Protection System (SUPS) that ensures the oil remains on the gear teeth even after prolonged shutdown. This ensures that the gears are immediately protected when the gearbox starts up without having to wait for the service lubricant to be picked up and splashed around inside the box.

The FOODLUBE Hi-Torque range of tenacious, EP gear oils contain additives to boost performance and improve adhesion and are ideal for use in food, pharmaceutical and other clean environments where NSF H1 lubricants are required.

Features and Benefits

- FOODLUBE Hi-Torque gear oils offers excellent wide temperature resistance of -20°C to +150°C.
- FOODLUBE Hi-Torque 320 & 460 are ideal for high temperature chains up to 180°C.
- The range has outstanding EP performance up to FZG load stage 12.
- FOODLUBE Hi-Torque gear oils provides a tenacious, EP film with excellent water wash off resistance and corrosion protection.
- FOODLUBE Hi-Torque gear oils have excellent stability resulting in extended relubrication intervals and a reduction in lubricant usage.

Directions for Storage and Use

- For optimum performance drain & flush prior to filling with ROCOL FOODLUBE Hi-Torque gear oils.
- Additive packages are not required with FOODLUBE Hi-Torque oils due to their inherent EP Performance.
- The storage temperature should be controlled between +1°C and +40°C.
- Shelf life is 3 years from date of manufacture.

Specifications

- FOODLUBE Hi-Torque oils do not contain: mineral hydrocarbons, animal derived materials, nut oils or genetically modified ingredients.
- FOODLUBE Hi-Torque oils are manufactured from only FDA listed ingredients:
 - o FDA Group 21 CFR 178.3570
- FOODLUBE Hi-Torque oils are NSF registered:
 - FOODLUBE Hi-Torque 150 121604
 - FOODLUBE Hi-Torque 220 122073
 - FOODLUBE Hi-Torque 320 122072
- FOODLUBE Hi-Torque 460 122071
- ISO 21469 certified
- DIN 51517-3 CLP

Pack Sizes

Pack Size	Part Code			
FOODLUBE Hi-Torque	5L	20L	200L	
150	15426	15425	15429	
220	15526	15525	15529	
320	15766	15765	15769	
460	15776	15775	15779	

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Property	Test Method	Result		
Appearance	Visual	Pale yellow, almost colourless, liquid		
Base Type	N/A	Polyalphaolefin		
Additives	N/A	SUPS		
Base Fluid Viscosity & VI		40°C	100°C	VI
FOODLUBE Hi-Torque 150	IP71 - ASTM D445	150cSt	17.7cSt	130
FOODLUBE Hi-Torque 220	IP71 - ASTM D445	220cSt	24.9cSt	138
FOODLUBE Hi-Torque 320	IP71 - ASTM D445	320cSt	29.9cSt	143
FOODLUBE Hi-Torque 460	IP71 - ASTM D445	460cSt	38.5cSt	131
Temperature Range - Standard	N/A	-20°C to +150°C		
Extreme low temperatures (Contact Technical Department to discuss specific applications)	N/A	Can be used down to -50°C depending on viscosity grade and application		
FZG Load Stage A/8.3/90	IP334 - ASTM D5182	12		
FAG FE8 rolling bearing test				
Wear (element)	DIN 51819-3, D7.5/80-80	<30mg		
Wear (cage)	DIN 51819-3, D7.5/80-80	<200mg		
Anti-corrosion (steel)	DIN ISO 7120 (A)	No rust		

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: 3 Date: 08-12

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FOODLUBE HI-TORQUE RANGE

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Compilation date: 21/11/2012

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Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: FOODLUBE HI-TORQUE RANGE

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: Gear Lubricant

1.3. Details of the supplier of the safety data sheet

Company name: ROCOL

ROCOL House Swillington

Leeds

West Yorkshire LS26 8BS ENGLAND

Tel: +44 (0) 113 232 2700 **Fax:** +44 (0) 113 232 2740

Email: customer-service@rocol.com

1.4. Emergency telephone number

Emergency tel: +44 (0) 113 232 2600

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: This product has no classification under CHIP.

2.2. Label elements

Label elements under CHIP:

Hazard symbols: No significant hazard.

2.3. Other hazards

PBT: This substance is not identified as a PBT substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Contains: NON-HAZARDOUS SUBSTANCE1 - 100%

Section 4: First aid measures

FOODLUBE HI-TORQUE RANGE

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4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water. **Eye contact:** Bathe the eye with running water for 15 minutes.

Ingestion: Wash out mouth with water.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: No symptoms.

4.3. Indication of any immediate medical attention and special treatment needed

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Use water spray to cool containers. Alcohol or polymer foam. Dry chemical powder.

Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact

with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for

disposal by an appropriate method.

6.4. Reference to other sections

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Avoid the formation or spread of mists in the air.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep away from direct sunlight.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: Not applicable.

8.2. Exposure controls

Respiratory protection: Respiratory protection not normally required.

Hand protection: Protective gloves.

Eye protection: Safety glasses with side-shields.

Skin protection: Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

Odour: Barely perceptible odour

Evaporation rate: Negligible

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Insoluble

Viscosity: Non-viscous

Melting point/range°C: < -20 Flash point°C: > 250
Autoflammability°C: > 270 Relative density: 0.85

9.2. Other information

Other information: Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Conditions to avoid: Heat. Direct sunlight.

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10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong reducing agents.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values: Not applicable.

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: No symptoms.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: Not applicable.

12.2. Persistence and degradability

Persistence and degradability: Only slightly biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: Slightly bioaccumulable.

12.4. Mobility in soil

Mobility: Non-volatile. Insoluble in water. Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This substance is not identified as a PBT substance.

12.6. Other adverse effects

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal of packaging: Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

NB: The user's attention is drawn to the possible existence of regional or national

regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

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Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: Contains only FDA listed ingredients. NSF H1 registered.

This safety data sheet is prepared in accordance with Commission Regulation (EU) No

453/2010.

Compiled in accordance with REACH.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive

and shall be used only as a guide. This company shall not be held liable for any

damage resulting from handling or from contact with the above product.