



SAPPHIRE® Aqua-Sil Hi-Load

Highly resistant silicone grease, with molybdenum disulphide, for long term lubrication

Product Overview

ROCOL® SAPPHIRE Aqua-Sil Hi-Load is a smooth, grey/black, silicone grease that has been designed for the lubrication of seals, 'O' rings, slides, slow speed bearings and other applications.

SAPPHIRE Aqua-Sil Hi-Load has a high dielectric strength, is resistant to chemicals, oils and gases and can be used as an electrical filling compound.

SAPPHIRE Aqua-Sil Hi-Load has good load carrying and is ideal for long term lubrication at extreme operating temperatures.

Water Regulations Advisory Scheme – Approved Product – Approval Number: 1203533

Features and Benefits

- Excellent wide temperature resistance – ranging from -40°C to +200°C and it can protect up to +220°C for short periods.
- Outstanding resistance to chemicals oils and gases far superior to standard greases.
- Excellent resistance to water, including salt water ensuring components are protected even in submerged conditions.
- SAPPHIRE Aqua-Sil Hi-Load is approved for use in both hot and cold potable (drinking) water.
- Suitable for use as a rubber lubricant for most rubbers (not suitable for silicone rubber).
- Extremely long wet life reducing re-lubrication frequencies and in some cases can be used as a lifetime lubricant.
- High dielectric strength making it ideal for use as an electrical filling compound.

Directions for Storage and Use

- SAPPHIRE Aqua-Sil Hi-Load can be applied manually, by a silicone grease gun, or by other methods suitable for use with silicone greases containing solid additives.
- For best results the previous lubricant should be removed prior to application.
- DO NOT USE ON SILICONE RUBBER.
- The storage temperature should be controlled between +1°C and +40°C.
- Shelf life is 3 years from date of manufacture.

Typical Applications

SAPPHIRE Aqua-Sil Hi-Load is designed for long term, and possibly lifetime, lubrication depending on application.

SAPPHIRE Aqua-Sil Hi-Load is particularly suitable as a rubber assembly grease on seals, 'O' rings, gaskets washers, valves and valve seals in medium to heavy duty applications.

- SAPPHIRE Aqua-Sil Hi-Load is ideal for use where a high performance, water and chemical resistant lubricant is required such as Water Authorities, Gas & Plumbing, and most other industries where a multi-purpose water and chemical resistant silicone grease is required.

Pack Sizes

Pack Size	Part Code
500g	12263
5kg	12266
50kg	12268



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Property	Test Method	Result
Appearance	Visual	Smooth, grey/black grease
NLGI No.	IP 50 – ASTM D217	3 / 4
Base Type	N/A	Silicone oil
Base Fluid Viscosity at 40°C	IP 71	700cSt
Base Fluid Viscosity at 100°C	IP 71	380cSt
Thickener	N/A	Inorganic colloid
Solids	N/A	Molybdenum disulphide
Temperature Range	N/A	-40°C to +200°C (+220°C short periods)
Evaporation Loss 24 hrs at 100°C	N/A	<0.5%
Oil Separation 24 hrs at 100°C	IP 121	<2.5%
Copper Corrosion Test 24 hrs at 100°C	IP 112 – ASTM D130	No stain
Oxidation Resistance (Pressure Drop)	IP 142	Less than 1 psi
Dielectric Strength	N/A	30kv/mm
Volume Resistivity	N/A	3 x 10 ¹¹ ohm/m
DmN Factor	N/A	100,000

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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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



SAFETY DATA SHEET
SAPPHIRE AQUA-SIL HI-LOAD

Page: 1

Compilation date: 22/11/2012

Revision No: 5

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

1.1. Product identifier

Product name: SAPPHIRE AQUA-SIL HI-LOAD

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

Use of substance / mixture: PC24: Lubricants, greases, release products.

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

[cont...]

SAFETY DATA SHEET

SAPPHIRE AQUA-SIL HI-LOAD

Page: 2

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.

Ingestion: There may be irritation of the 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. Suitable extinguishing media for the surrounding fire should be used.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

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.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: 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.

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SAFETY DATA SHEET

SAPPHIRE AQUA-SIL HI-LOAD

Page: 3

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area.

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: Paste

Colour: Black

Odour: Odourless

Evaporation rate: Negligible

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Insoluble

Viscosity: Highly viscous

Melting point/range°C: > 200

Flash point°C: > 150

Autoflammability°C: > 150

Relative density: 0.99

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.

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SAFETY DATA SHEET
SAPPHIRE AQUA-SIL HI-LOAD

Page: 4

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.

Ingestion: There may be irritation of the 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: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Non-volatile. Absorbed only slowly 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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SAFETY DATA SHEET
SAPPHIRE AQUA-SIL HI-LOAD

Page: 5

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: 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.