MARINE & OFFSHORE
Speciality Lubricants for the Marine & Offshore Industries
Performance you can trust
ROCOL® has been providing engineers with high performance lubrication solutions for more than 130 years.

During that time we have worked with some of the world’s leading companies in many diverse industries and applications, developing products with one common goal: Performance You Can Trust

At ROCOL we manufacture a range of innovative greases, oils, metalworking fluids, lubricants, aerosol paints, anti-slip floorcoatings and panels - all designed to excel in today’s challenging operating conditions.

Over the last 130 years, we have expanded considerably and offer solutions to nearly every facet of industry with over 150 distributors stocking and supplying the product range worldwide.

We pride ourselves on producing technically advanced products with industry needs at the core. Each and every product has been developed in the spirit ROCOL is renowned for.

- Trusted Superior Performance
- Problem Solving
- High Quality
- Technical Innovation
- Excellent Technical & After-Sales Support
CONTENTS

WIRE ROPE LUBRICATION 01
PFPE GREASES 05
ANTI-SEIZE & ASSEMBLY 07
OPEN GEAR LUBRICANTS 09
INDUSTRIAL CHAIN LUBRICANTS 10
INDUSTRIAL BEARING GREASES 11
CORROSION PROTECTION 13
METAL ENRICHED PAINTS 14
INDUSTRIAL MULTI-PURPOSE MAINTENANCE & CLEANERS 15
REAMING, TAPPING & DRILLING 16
SLIP PREVENTION 17
WIRE ROPE LUBRICATION
Wire ropes are like complex machines requiring dedicated lubricants to perform

ALTHOUGH SIMPLE IN APPEARANCE, THE INTRICATE CONSTRUCTION AND MULTITUDE OF DEMANDS PLACED ON WIRE ROPES MEANS THAT, LIKE ANY MACHINE, THEY MUST BE LUBRICATED TO ACHIEVE OPTIMUM PERFORMANCE AND SERVICE LIFE.

Reducing the internal friction generated during load application & removal and the bending of the rope over sheaves and drums is vital.

It is generally accepted that the bend fatigue life of a lubricated wire rope can be up to 60% longer than that of a non-lubricated rope.

Protecting the rope from the often severely corrosive conditions encountered in marine and other environments is another key consideration. Although ropes may appear in good condition, corrosion of the core may go unnoticed, creating a potentially dangerous situation.

The potential savings in both time and money in addition to improved operational safety mean that correct in-service lubrication is a key part of wire rope use.

KEY REQUIREMENTS OF WIRE ROPE LUBRICANTS
Whilst it may be clear that lubrication is a vital part of maximising rope life, delivering the correct balance of properties in a single product is a significant challenge. A wire rope lubricant must:

- Provide excellent corrosion protection
- Achieve maximum penetration to ensure protection of the rope core
- Be easy, pleasant and safe to apply
- Resist wash-off and fling-off
- Reduce friction and wear
- Operate at a range of temperatures
Environmentally Acceptable Lubricants are often quoted as having reduced performance capabilities when compared to traditional mineral oil lubricants. BIOGEN WIRESHIELD has been developed to either equal or outperform mineral oil lubricants.

OUTSTANDING CORROSION RESISTANCE
BIOGEN WIRESHIELD is proven to excel in the most corrosive environments. Identical sections of wire ropes were lubricated with BIOGEN WIRESHIELD and a leading competitor product, before being exposed to a salt spray fog for 1000 hours [ASTM B117].

PSEUDOPLASTIC RHEOLOGY
Shear or agitation causes a reduction in the dynamic viscosity, approaching that of an oil.

- Aiding penetration into the core of wire ropes and umbilicals.
- Increasing pumpability during automatic application, minimising blockages.

Whilst at rest the lubricant behaves like a highly tenacious grease optimising wash-off and fling-off resistance.

FULL VGP COMPLIANCE
The Vessel General Permit for Discharges Incidental to the Normal Operation of Vessels (VGP) is a US licence which works alongside the Clean Water Act. As a direct oil-to-sea interface, wire ropes and ROV umbilicals are legally required to use Environmentally Acceptable Lubricants (EALs), meaning they are biodegradable, non-bioaccumulative and have minimal eco-toxicity.

WIDE TEMPERATURE RANGE
BIOGEN WIRESHIELD has a service temperature range of -50°C to +180°C, making it ideal for arctic conditions as well as for active heave compensation. The advanced thickener system is designed to prevent the grease from melting, resulting in a drop point in excess of 250°C.

EUROPEAN ECOLABEL CERTIFIED
BIOGEN WIRESHIELD carries the European Ecolabel (Licence no. UK/27/013), therefore guaranteeing VGP compliance and promoting environmental excellence.

NO SHEEN FORMULA
BIOGEN WIRESHIELD will not impart sheen on water.

OUTSTANDING CORROSION RESISTANCE

PSEUDOPLASTIC RHEOLOGY

FULL VGP COMPLIANCE

WIDE TEMPERATURE RANGE

EUROPEAN ECOLABEL CERTIFIED

NO SHEEN FORMULA

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>20064</td>
<td>18kg</td>
</tr>
<tr>
<td>20069</td>
<td>160kg</td>
</tr>
</tbody>
</table>
Total assurance that the new generation of wire rope and umbilical lubricants will tick both the operational and ecological boxes can only be delivered through real-life field testing – and that’s exactly what one leading subsea services company has done. Aberdeen-based Fugro Subsea Services Ltd supports a wide range of customers operating in the North Sea, the Mediterranean and Africa. As part of a commitment to implement ecologically-sensitive solutions wherever possible whilst maintaining the performance its customers expect, the firm was looking for an ecologically sensitive and dependable solution for use on vessels.

Fugro Subsea Services Ltd operates a diverse fleet of ROVs (Remotely Operated Vehicles) and vessels which are commissioned for numerous offshore projects, including underwater construction projects, subsea engineering, inspection, repair and maintenance of pipelines and subsea structures and trenching in the oil, gas and renewable markets. Fugro’s client base includes many of the major oil and gas operators and world’s largest subsea contractors.

The company ran a trial using BIOGEN WIRESHIELD on ROVs operating from its Grampian Surveyor vessel for a three-month period off the coast of West Africa. The trial was designed to put the lubricant through its paces on umbilicals in the deepest operating waters (between 1000m and 3000m) – much deeper than the 100m to 200m depths typically found in the North Sea.

According to Fugro Subsea’s technical support engineer Andrew Morton, the trial results provided the assurances they sought and gave them the confidence to give BIOGEN WIRESHIELD approved product status.

As an Environmentally Acceptable Lubricant (EAL), BIOGEN WIRESHIELD was developed by ROCOL specifically to meet the biodegradable definition, according to the OECD 306 test method. Prior to customer trials, product testing had already demonstrated zero galvanic reaction after 1000 hours in salt spray tests, plus shear stability in the presence of salt water with little degradation.

Customer Feedback:

“Using a product such as BIOGEN WIRESHIELD means we are able to greatly extend the lifetime of our umbilicals, and we can avoid any long delays for umbilical repair or replacement whilst also respecting the environments in which we operate.”

Andrew Morton
Proven performance for over 40 years

WIRE ROPE DRESSING, previously known as RD105 has been the industry’s first line of defence against wire rope corrosion and wear for almost half a century.

WIRE ROPE Dressing
Multi-purpose rope lubricant
The unique blend of lubricating solids contained in the product reduces the internal friction and wear encountered in multi-strand wire ropes. It is highly resistant to water wash-off and provides excellent corrosion protection, making it suitable for use even in salt water environments.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIRE ROPE Dressing</td>
<td>20026</td>
<td>4kg</td>
</tr>
<tr>
<td></td>
<td>20024</td>
<td>18kg</td>
</tr>
</tbody>
</table>

WIRE ROPE Fluid
Ideal for spray application
Fluid version of WIRE ROPE Dressing. Specially selected petroleum solvents added to the formulation provide both enhanced de-watering and penetration properties making the product particularly suitable for use on wet ropes. The fluid nature also makes the product suitable for spray application. Once the solvent evaporates performance is identical to WIRE ROPE Dressing.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIRE ROPE Fluid</td>
<td>20046</td>
<td>5L</td>
</tr>
<tr>
<td></td>
<td>20045</td>
<td>20L</td>
</tr>
</tbody>
</table>

WIRE ROPE Spray
Convenient aerosol pack
Convenient aerosol version of WIRE ROPE Dressing. The solvents and propellants provide enhanced de-watering and penetration properties making the product suitable for use on wet ropes. The convenience of the aerosol dispenser makes this product ideal for use on equipment such as mobile cranes and for spot application to high wear sections of rope. Once the solvent evaporates, performance is identical to WIRE ROPE Dressing.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIRE ROPE Spray</td>
<td>20015</td>
<td>400ml</td>
</tr>
</tbody>
</table>

- Approved to NATO and Naval standards
- Highly refined mineral oil
- Unique clay based thickener
- Semi fluid, non-melting grease
Extreme resistance PFPE greases for use in hostile environments

Bearings • Small Gears • Slides • Pins • Valves • Plungers • Screws

- Oxygen Compatible & Non-Combustible
- Broad Temperature Service
- Exceptional Compatibility with Rubbers, Plastics and Metals
- Highly Resistant to Acid, Solvent & Chemical Attack
- Vacuum Resistant

ROCOL PFPE GREASES ARE DESIGNED TO OPERATE WHERE OTHER LUBRICANTS FAIL

Some environments are too hostile for conventional greases; conversely, conventional greases are often aggressive towards delicate environments. ROCOL PFPE greases are designed to prevent the following issues:

- Embrittlement, swelling and shrinking of rubbers and plastics
- Stressing of metals
- Strong odours
- Contact wear
- Evaporative loss
- Equipment failure at both high and low temperatures
- Oxidation
- Fires caused by lubricants

PFPE GREASES IN THE MARINE AND OFFSHORE INDUSTRIES

Greases used in the Marine and Offshore industries are often exposed to aggressive environments and chemicals. PFPE greases are an ideal choice where grease compatibility is essential, for example in valves and pumps. ROCOL PFPE greases are recommended on Ministry of Defence diving and breathable air control systems, and often used in “fit and forget” and “sealed for life” lubricant applications.
PFPE GREASES

The PFPE base fluids used in ROCOL® PFPE greases have extremely low volatility due to their long carbon chains, which prevents the grease from evaporating when exposed to high vacuum or extensive periods of high temperature. ROCOL YVAC3 is the preferred lubricant for high vacuum applications.

An added benefit of the low volatility of PFPE greases is reduced odour, making it ideal for use in highly sensitive environments.
**ANTI-SEIZE & ASSEMBLY**

The ROCOL® Anti-Seize & Assembly range is specially formulated to reduce downtime and costs of assembly.

Our products provide a durable barrier between metal to metal surfaces, offering many years of protection against galling, pick-up and corrosion.

<table>
<thead>
<tr>
<th>BASE</th>
<th>SPECIFICATION</th>
<th>PART CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANTI-SEIZE 717</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nickel</td>
<td>-40°C to +1100°C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.085</td>
<td></td>
</tr>
<tr>
<td></td>
<td>➞ Nuclear grade</td>
<td></td>
</tr>
<tr>
<td></td>
<td>➞ Rolls Royce MSRR 9380</td>
<td>16403 (500g)</td>
</tr>
<tr>
<td></td>
<td>➞ Rolls Royce OMAT 4/56</td>
<td></td>
</tr>
<tr>
<td><strong>ANTI-SEIZE Compound</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper, graphite, molybdenum</td>
<td>-50°C to +1100°C</td>
<td></td>
</tr>
<tr>
<td>disulphide</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>➞ Excellent corrosion protection, in the most aggressive environments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>➞ Naval Cat. No. 0475-541-8659</td>
<td>14030 (85g)</td>
</tr>
<tr>
<td></td>
<td>➞ RAF Cat. No. 34D/301-6210</td>
<td>14032 (500g)</td>
</tr>
<tr>
<td></td>
<td>➞ Rolls Royce OMAT 4/56</td>
<td>14033 (6kg)</td>
</tr>
<tr>
<td></td>
<td>➞ Naval Cat. No. 0475-541-8659</td>
<td>14035 (18kg)</td>
</tr>
<tr>
<td><strong>ANTI-SEIZE Regular Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphite, copper, aluminium</td>
<td>-180°C to +1100°C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>➞ Excellent corrosion protection, in the most aggressive environments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>➞ Resists vibrations, high pressure and high temperature</td>
<td></td>
</tr>
<tr>
<td></td>
<td>➞ Naval Cat. No. 0475-541-8659</td>
<td>14026 (250g)</td>
</tr>
<tr>
<td></td>
<td>➞ RAF Cat. No. 34D/301-6210</td>
<td>14027 (500g)</td>
</tr>
<tr>
<td><strong>ANTI-SEIZE Spray</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper, graphite, molybdenum</td>
<td>-10°C to +1100°C</td>
<td></td>
</tr>
<tr>
<td>disulphide, aluminium</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>➞ Excellent corrosion protection, in the most aggressive environments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>➞ Aerosol allows quick and easy application</td>
<td></td>
</tr>
<tr>
<td></td>
<td>➞ Naval Cat. No. 0475-179-9539</td>
<td>14015 (400ml)</td>
</tr>
<tr>
<td><strong>ANTI-SEIZE Stainless</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphite</td>
<td>-40°C to +1100°C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.085</td>
<td></td>
</tr>
<tr>
<td></td>
<td>➞ Ideal for stainless steel and aluminium</td>
<td></td>
</tr>
<tr>
<td></td>
<td>➞ Rolls Royce MSRR 4008</td>
<td>14143 (500g)</td>
</tr>
<tr>
<td></td>
<td>➞ Naval Cat. No. 0475-179-9539</td>
<td></td>
</tr>
</tbody>
</table>

ROCOL ANTI-SEIZE PRODUCTS OFFER EXCELLENT WATER-RESISTANCE AND CORROSION PROTECTION EVEN WHEN SUBMERGED, MAKING THEM IDEAL FOR SUBSEA APPLICATIONS.
ANTI-SEIZE & ASSEMBLY

**ASSEMBLY LUBRICATION**

**DRY MOLY Fluid, Paste and Spray**
Extreme load, dry film molybdenum disulphide paste, designed for use where a wet lubricant cannot be tolerated.

**MTLM ASSEMBLY & RUNNING-IN PASTE**
High content molybdenum disulphide coating. Eases assembly and provides complete protection during critical start-up and running-in periods.

**OXYLUBE Spray**
High content molybdenum disulphide paste. Oxygen compatible and suitable for aggressive environments such as vacuum and petroleum based solvents.

**DISMANTLING LUBRICATION**

**PENETRATING Spray**
A powerful release agent for seized or corroded components, for fast acting release even after prolonged periods of seizure.

**SHOCK RELEASE Spray**
A fast acting release spray that uses shock freeze action to rapidly free mechanical assemblies, seized by dirt or corrosion.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRY MOLY Fluid</td>
<td>10205</td>
<td>5L</td>
</tr>
<tr>
<td>DRY MOLY Paste</td>
<td>10040</td>
<td>100g</td>
</tr>
<tr>
<td>DRY MOLY Spray</td>
<td>10046</td>
<td>750g</td>
</tr>
<tr>
<td></td>
<td>10025</td>
<td>400ml</td>
</tr>
<tr>
<td>MTLM</td>
<td>10050</td>
<td>100g</td>
</tr>
<tr>
<td></td>
<td>10056</td>
<td>750g</td>
</tr>
<tr>
<td></td>
<td>10057</td>
<td>18kg</td>
</tr>
<tr>
<td>OXYLUBE Spray</td>
<td>10125</td>
<td>400ml</td>
</tr>
<tr>
<td>PENETRATING Spray</td>
<td>14021</td>
<td>300ml</td>
</tr>
<tr>
<td>SHOCK RELEASE Spray</td>
<td>32040</td>
<td>400ml</td>
</tr>
</tbody>
</table>

**ROCOL ANTI-SEIZE**
Specially formulated to reduce downtime and cost of assembly.
OPEN GEAR LUBRICANTS

Designed to reduce equipment failure and downtime, ROCOL® Open Gear lubricants offer excellent resistance to corrosion and wear, even in damp and wet conditions, making them ideal for use in the Marine & Offshore industries.

TUFGEAR Universal

Heavy duty open gear lubricant
A heavy duty open gear grease containing a blend of high load carrying solids.

- Suitable for use in strong under water currents and high loads
- Excellent corrosion resistance to protect in humid, damp and wet conditions
- Outstanding EP performance
- Excellent adhesion to gear teeth – no fling
- Reduces equipment failure and downtime
- Approved to NATO, Naval and RAF Standards
- Temperature range -40°C to +120°C

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>18302</td>
<td>400g</td>
</tr>
<tr>
<td>18305</td>
<td>5kg</td>
</tr>
<tr>
<td>18304</td>
<td>18kg</td>
</tr>
</tbody>
</table>

TUFGEAR Spray

Heavy duty open gear lubricant
A high viscosity, heavy duty open gear grease containing a blend of high load carrying solids to provide excellent anti pitting properties.

- Excellent corrosion resistance to protect in humid, damp and wet conditions
- Outstanding EP performance
- Thin film minimises attraction of dust and dirt
- Excellent load carrying capacity and resistant to water
- Approved to NATO Standards
- Temperature range of -10°C to +100°C

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>18105</td>
<td>400ml</td>
</tr>
</tbody>
</table>

TUFLUBE Allweather

Highly versatile, totally water resistant lubricant that can even be applied when fully submerged
A highly adhesive lubricant designed for effective lubrication and protection in extremely wet and highly loaded environments.

- Outstanding EP performance
- Excellent corrosion resistance to protect in humid, damp and even wet conditions
- Highly resistant to water wash off
- Tenacious, self-repairing film
- Pumpable and can be applied through automatic lubricator
- Free from bitumen and solvents
- Temperature range -30°C to +70°C

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>18271</td>
<td>400g</td>
</tr>
<tr>
<td>18276</td>
<td>5kg</td>
</tr>
<tr>
<td>18244</td>
<td>18kg</td>
</tr>
</tbody>
</table>
INDUSTRIAL CHAIN LUBRICANTS

ROCOL® offers a comprehensive range of lubricants designed to rapidly penetrate chain links and pins and operate in a wide range of environments.

CHAIN & DRIVE Spray

High performance chain lubricant with exceptional penetration, corrosion protection and lubrication properties

Versatile, high performance, chain lubricant suitable for all types of drive and conveyor chains in a convenient aerosol can.

- Multi-purpose drive and conveyor chain lubricant
- Unbeatable corrosion protection
- Ideal for wet and humid conditions
- Good water displacing properties
- Highly water repellent
- Excellent anti-wear performance
- Approved to RAF, Naval and NATO Standards
- Temperature range -30°C to +150°C

CHAIN & DRIVE Fluid

Multi-purpose chain lubricant for maximum penetration and lubrication

Highly versatile, high performance, chain lubricant suitable for all types of drive and conveyor chains.

- Superb load carrying properties
- Excellent penetration into links and pins
- Good resistance to water wash off
- Outstanding corrosion protection
- Long term lubrication
- Temperature range -15°C to +120°C

CHAINGUARD Hi-Load Spray

High performance, heavy duty, molybdenum disulphide chain lubricant

High performance, aerosol chain lubricant containing molybdenum disulphide for use in the most arduous conditions. Ideally suited for use on all types of chains under heavy loads.

- Heavy duty, multi-purpose drive and conveyor lubricant
- Ideal for fork lift truck chains
- Fortified with molybdenum disulphide for exceptional load and wear resistance
- Excellent corrosion protection
- Ideal for wet and humid conditions
- Good water displacing properties
- Highly water repellent
- Temperature range -30°C to +180°C

WHATEVER THE TYPE OF DRIVE OR CONVEYOR CHAIN IN USE, ROCOL CAN PROVIDE A LUBRICANT TO ENSURE TROUBLE-FREE OPERATION, CUTTING EXPENSIVE DOWNTIME AND PRODUCTIVITY LOSS
INDUSTRIAL BEARING GREASES

The ROCOL SAPPHIRE® bearing grease range will provide effective long term lubrication and meet the ever increasing needs of today’s production environment.

SAPPHIRE

High performance, triple life bearing grease
Revolutionary long life bearing grease for optimum lubrication. Suitable for all types of ball, roller and plain bearings.

- Triple life bearing grease
- Extreme load and wear performance
- Extended lubrication intervals
- Revolutionary multi-complex grease
- Good corrosion resistance
- Temperature range -30°C to +150°C

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLGI 2</td>
<td>12171</td>
<td>400g</td>
</tr>
<tr>
<td></td>
<td>12176</td>
<td>5kg</td>
</tr>
<tr>
<td></td>
<td>12175</td>
<td>18kg</td>
</tr>
<tr>
<td></td>
<td>12178</td>
<td>50kg</td>
</tr>
<tr>
<td></td>
<td>12179</td>
<td>195kg</td>
</tr>
<tr>
<td>NLGI 1</td>
<td>12601</td>
<td>400g</td>
</tr>
<tr>
<td></td>
<td>12614</td>
<td>18kg</td>
</tr>
<tr>
<td></td>
<td>12608</td>
<td>50kg</td>
</tr>
<tr>
<td>NLGI 000</td>
<td>12276</td>
<td>5kg</td>
</tr>
<tr>
<td></td>
<td>12284</td>
<td>18kg</td>
</tr>
</tbody>
</table>

SAPPHIRE Premier

Versatile, multi-purpose, synthetic grease with PTFE
A high performance, fully synthetic multi-purpose grease designed for all types of antifriction bearings operating in extreme conditions.

- Extreme high and low temperature capability
- High speed applications such as fan and motor bearings
- Extended lubrication intervals
- Ideal electrical contact grease
- Compatible with most plastics and rubbers
- Temperature range -50°C to +200°C

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLGI 2</td>
<td>12471</td>
<td>380g</td>
</tr>
<tr>
<td></td>
<td>12475</td>
<td>4kg</td>
</tr>
<tr>
<td></td>
<td>12474</td>
<td>18kg</td>
</tr>
<tr>
<td></td>
<td>12479</td>
<td>170kg</td>
</tr>
</tbody>
</table>

SAPPHIRE Spray Grease

Versatile, multi-purpose, synthetic spray grease with PTFE
A high performance, fully synthetic multi-purpose grease supplied in an aerosol for ease of application and convenience.

- Extreme high and low temperature capability
- High speed applications such as fan and motor bearings
- Extended lubrication intervals
- Ideal electrical contact grease
- Compatible with most plastics and rubbers
- Fortified with PTFE
- Temperature range -50°C to +200°C

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>34305</td>
<td>400ml</td>
</tr>
</tbody>
</table>

SAPPHIRE Lo-Temp 2

High performance, low temperature grease for improved bearing life
A revolutionary, multi-complex, semi-synthetic grease designed for excellent performance at extremely low temperatures. Ideal for cold stores and other refrigerated areas.

- Low start up and running torques
- Triple life bearing grease
- Extreme load and wear performance
- Revolutionary multi-complex grease
- Extended lubrication intervals
- Temperature range -50°C to +120°C

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLGI 2</td>
<td>12741</td>
<td>400g</td>
</tr>
<tr>
<td></td>
<td>12744</td>
<td>18kg</td>
</tr>
</tbody>
</table>
INDUSTRIAL BEARING GREASES

SAPPHIRE Aqua 2
Water resistant bearing grease
A high performance grease designed to give superior resistance to water washout. For use in all types of ball, roller and rolling bearings.
- Outstanding long term water resistance, even when submerged
- Excellent corrosion protection
- Extended lubrication intervals
- Good load and wear performance
- Temperature range of –20°C to +150°C

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLGI 2</td>
<td>12751</td>
<td>380g</td>
</tr>
<tr>
<td></td>
<td>12755</td>
<td>4kg</td>
</tr>
<tr>
<td></td>
<td>12754</td>
<td>18kg</td>
</tr>
<tr>
<td></td>
<td>12758</td>
<td>50kg</td>
</tr>
</tbody>
</table>

SAPPHIRE Endure
Premium, long-life, chemical resistant lubricant
High performance, perfluoropolyether, extreme pressure grease fortified with PTFE. Designed to operate where conventional greases fail due to chemical contamination or attack.
- Extreme chemical and solvent resistant
- Resists caustic wash down
- Greatly extends lubrication intervals
- Excellent high load and anti-wear properties
- Extremely stable at high temperatures
- Approved by Rolls Royce for use on Harrier Pegasus Thrust Nozzle Drive Mechanism
- Also approved for Submarine Clearance
- Temperature range of -10°C to +280°C

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>12330</td>
<td>100g</td>
</tr>
<tr>
<td>12331</td>
<td>700g</td>
</tr>
<tr>
<td>12334</td>
<td>1kg</td>
</tr>
<tr>
<td>12336</td>
<td>5kg</td>
</tr>
<tr>
<td>12337</td>
<td>18kg</td>
</tr>
</tbody>
</table>

SAPPHIRE Aqua-Sil
Potable water and chemically resistant silicone grease
A high temperature, translucent silicone grease approved for use with potable water. Designed for the lubrication of slow speed bearings, slides and similar applications.
- Water Regulations Advisory Scheme - Approved Product
- Excellent high temperature performance range
- Ideal for the assembly of rubber ‘O’ rings and seals
- Good resistance to chemicals, oils, water and gasses
- Compatible with most rubbers and plastics
- Approved for use with hot or cold drinking water
- Temperature range of –40°C to +200°C.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLGI NO 3-4</td>
<td>12251</td>
<td>85g</td>
</tr>
<tr>
<td></td>
<td>12253</td>
<td>500g</td>
</tr>
<tr>
<td></td>
<td>12256</td>
<td>5kg</td>
</tr>
</tbody>
</table>

SAPPHIRE Aqua-Sil Hi-Load
Heavy duty, potable water and chemically resistant silicone grease
A high temperature, dark grey silicone grease, containing molybdenum disulphide approved for use with potable water. Recommended for the lubrication of bearings, slides and valves operating under heavy loads in aggressive environments.
- Water Regulations Advisory Scheme - Approved Product
- Excellent high temperature performance range
- Particularly suited for larger valves and assemblies common to water treatment plants
- Good resistance to chemicals, oils, water and gasses
- Compatible with most rubbers and plastics
- Approved for use with hot or cold drinking water
- Temperature range of –40°C to +200°C.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLGI NO 3-4</td>
<td>12263</td>
<td>500g</td>
</tr>
<tr>
<td></td>
<td>12266</td>
<td>5kg</td>
</tr>
</tbody>
</table>
CORROSION PROTECTION

ROCOL® corrosion preventatives protect metal components, extending working life and reducing the need for rework and repair.

Z25 Fluid
**Oily, de-watering, corrosion inhibitor for indoor protection**
Light /medium duty, multipurpose lubricant. Ideal for the light lubrication of chains, hinges, linkages and pins.

- Good dewatering and penetration properties
- Provides a thin, high performance oily film
- Excellent corrosion protection indoors for up to 1 year
- Specially formulated to clean oil contaminated parts
- Ideal for light lubrication of chains, hinges, linkages and pins
- Does not contain silicones or chlorinated solvents
- Temperature range -20°C to +110°C

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>37118</td>
<td>20L</td>
</tr>
</tbody>
</table>

Z30 Fluid & Spray
**Outdoor, long-lasting, waxy corrosion preventative**
Heavy duty waxy film for long term outdoor corrosion protection of various machinery parts.

- Good dewatering and penetration properties
- Thin, flexible film - does not crack or chip
- Does not contain silicones or chlorinated solvents
- Dry film - does not attract dirt or dust
- Temperature range -20°C to +110°C
- Ideal for long term protection of underground installations and offshore platforms
- Available in both fluid and aerosol form
- Approved to NATO standards (aerosol)

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spray</td>
<td>37020</td>
<td>300ml</td>
</tr>
<tr>
<td>Fluid</td>
<td>37022</td>
<td>5L</td>
</tr>
<tr>
<td>Fluid</td>
<td>37028</td>
<td>20L</td>
</tr>
</tbody>
</table>

Z50 Fluid
**Coiled Tubing Corrosion Inhibitor**
Patented water-extendible corrosion inhibitor to prevent corrosion and pitting on the internal surface of coiled tubing.

- Effectively neutralizes organic and inorganic acids
- Provides excellent residual corrosion protection
- Extends tube life and minimizes the risk of in service failure
- Simple and quick to use
- Does not require additional expensive equipment
- Readily biodegradable

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>37049</td>
<td>200L</td>
</tr>
</tbody>
</table>

HEAVY DUTY RUSTSHIELD Spray
**Red, waxy corrosion preventative for higher visibility**
Long-term, outdoor corrosion preventative for protection of all machined or pressed steel components.

- Effective outdoor corrosion protection
- Mild de-watering action
- Ideal protection for components in storage and transit
- Dry film – doesn’t attract dirt or dust
- Thin flexible film – does not crack or chip

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>69100</td>
<td>300ml</td>
</tr>
</tbody>
</table>
METAL ENRICHED PAINTS

Available in a variety of finishes, the range offers a highly flexible method of galvanisation, which is suited to in-situ application and can be applied to both new and old metal components for long term protection against corrosion.

ROCOL® Metal Enriched Paints are single component zinc coatings for the protection of steel in heavy industrial and marine environments. All ROCOL metal enriched paints have a non-toxic formulation, are suitable for use as a primer and can be over painted. The high performance valve will not block when used properly, minimising product waste.

COLD GALVANISING Spray

Ultimate long term corrosion protection for metal components requiring a permanent zinc-rich coating
- Greater than 95% high purity zinc in the dry film
- Zero corrosion following 3500 hours salt spray
- Temperature range -30°C to +450°C
- Galvanic cell continues to protect bare metal when scratched

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>69515</td>
<td>400ml</td>
</tr>
</tbody>
</table>

GALVA MATT

Outstanding long term corrosion protection for metal components requiring a permanent matt coating
- Greater than 70% high purity zinc in the dry film
- Zero corrosion following 2000 hours salt spray
- Temperature range -30°C to +450°C

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>69524</td>
<td>500ml</td>
</tr>
</tbody>
</table>

GALVA BRIGHT

Outstanding long term corrosion protection for metal components requiring a permanent bright coating
- Greater than 45% high purity zinc in the dry film
- Zero corrosion following 2000 hours salt spray
- Temperature range -30°C to +450°C
- Contains zinc, aluminium, synthetic resins & additives

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>69523</td>
<td>500ml</td>
</tr>
</tbody>
</table>

GALVA FLASH

Corrosion protection for metal components requiring a permanent bright, glossy appearance with the lustre of aluminium
- Zinc and aluminium blend for a permanent reflective metal appearance
- Zero corrosion following 1000 hours salt spray
- Temperature range -30°C to +450°C

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>69522</td>
<td>500ml</td>
</tr>
</tbody>
</table>

SALT SPRAY TEST ASTM B117*

*Salt water is sprayed onto steel plates coated with Metal Enriched Paints. The number of hours for which corrosion can be resisted is measured.
INDUSTRIAL MULTI-PURPOSE MAINTENANCE & CLEANERS

The ROCOL® range of general purpose maintenance & cleaning products are designed to be an easy to use and cost effective part of any maintenance & cleaning program in any industry.

WD Spray
Highly effective, water displacing spray that lubricates, penetrates and protects against corrosion
A blend of refined mineral oil designed for use as a multi-purpose product. It is ideal for use as a general lubricant to protect small components such as hinges and locks.

- Powerful jet application to mechanically penetrate rust and debris
- Displaces water – ideal for drying out engine ignition systems
- Fast acting formulation
- Excellent corrosion protection
- Assists release of seized parts

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>34271</td>
<td>300ml</td>
</tr>
</tbody>
</table>

SAPPHIRE® Precision Lube Spray
Multipurpose, high performance spray lubricant with PTFE
A high performance, colourless non stick lubricating film with wide temperature stability for use on slides, chutes, bearings and conveyors.

- Extended life and reduced waste due to significantly higher levels of active ingredient
- Resists oxidation and corrosion
- Non toxic, clean and colourless
- Approved to NATO Standards
- Wide temperature range -50°C to +200°C

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>34341</td>
<td>400ml</td>
</tr>
</tbody>
</table>

METAL REPAIR Compound
New and improved, solvent free, epoxy putty containing non-rusting metallic fillers
A permanent repair compound which can be used to repair castings, valve and pump components.

- 4 minute cure time and full use after just 1 hour
- Binds to a wide range of substrates: metal, glass, ceramic, concrete, fibreglass and wood
- Eliminates the need for welding and brazing
- Can be applied underwater
- Permanent strength up to 23MPa
- Temperature range up to +150°C

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>64012</td>
<td>56g</td>
</tr>
</tbody>
</table>

HEAVY DUTY CLEANER Spray & Fluid
High performance, heavy duty, water emulsifiable cleaner
A powerful slow-evaporating, water emulsifiable, solvent based cleaner suitable for use in most general industrial environments.

- Emulsifies the oil and grease to allow removal by hosing or wiping
- Safe on metal, paint and most plastics
- Free from chlorinated solvents
- Available as an aerosol or bulk fluid

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spray</td>
<td>34011</td>
<td>300ml</td>
</tr>
<tr>
<td>Fluid</td>
<td>34014</td>
<td>5L</td>
</tr>
</tbody>
</table>

SCRUBS®
Highly effective, waterless, hand-cleaning wipe
The citrus-based formula in Scrubs is combined with a tough, textured towel to loosen, dissolve and absorb dirt and grease leaving your hands truly clean.

- One side of the towel is textured for heavy duty cleaning
- Will not transfer soil back onto hands
- One step cleaning process
- Conditions & softens hands
- Tough durable bucket that is light & portable

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>34100</td>
<td>72 Tub</td>
</tr>
</tbody>
</table>
RTD® is the world leading hand applied lubricant for Reaming, Tapping & Drilling operations. The RTD range contains technically advanced extreme pressure additives which reduce friction at the cutting edge.

RTD significantly extends the tool life, providing cost saving benefits. The additives also give superior surface finish to the work piece, reducing waste and scrap. As part of an ongoing development programme, RTD technology remains at the forefront in cutting performance. RTD has been successfully serving industry for nearly 60 years, bringing cost savings and performance to a wide cross section of industries.

RTD lubricants are formulated to:
- Double tool life
- Reduce wear & tap breakages
- Promote excellent surface finish
- Increase rates of metal removal
- Minimise waste and scrap
- Multi metal compatibility

**RTD Liquid**
*Metal cutting liquid which doubles tool life*
- Ultimate cutting performance
- Flows to the cutting edge
- Suitable for the most severe cutting operations
- Available in a plastic squeeze bottle for easy application

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>53072</td>
<td>400g</td>
</tr>
<tr>
<td>53076</td>
<td>5L</td>
</tr>
<tr>
<td>53078</td>
<td>20L</td>
</tr>
</tbody>
</table>

**RTD Compound**
*Metal cutting compound which doubles tool life*
- Suitable for the most severe cutting operations
- Soft low melting-point paste
- Formulated to cling to the tool providing excellent cutting performance
- Application by brush – economical in use
- Rolls Royce approved – Spec CSS 137
- NATO stock number: 464-6766

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>53020</td>
<td>50g</td>
</tr>
<tr>
<td>53023</td>
<td>500g</td>
</tr>
<tr>
<td>53026</td>
<td>5kg</td>
</tr>
<tr>
<td>53028</td>
<td>18kg</td>
</tr>
</tbody>
</table>

**RTD Spray**
*Metal cutting lubricant which doubles tool life*
- Suitable for the most severe cutting operations
- Ideal for use where accessibility is a problem
- Can be applied directly to moving tools
- NATO stock number: 541-7134

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>53011</td>
<td>400ml</td>
</tr>
</tbody>
</table>
SLIP PREVENTION

ROCOL® offers a broad range of anti-slip products, reducing the risk of slips, trips and falls.

SAFE STEP®

Much of the technology employed in the manufacture of SAFE STEP anti-slip products was originally developed for use on the flight decks of Navy aircraft carriers. The coating has been tested to withstand a minimum of 15,000 high impact landings from an aircraft, weighing 32 tonnes and landing at 175 mph.

SAFE STEP 50
For application in large areas of low pedestrian traffic e.g. factory floors, garages and storage areas
- Coverage: 20m² per pack (roller applied)
- Resin: Chlorinated rubber / Alkyd Resin
- Drying Time: 6 hours light traffic / 16 hours heavy traffic
- Single component system

SAFE STEP 100
For application in areas of heavy pedestrian traffic e.g. ramps, steps and work platforms
- Coverage: 3.7m² per pack (roller applied)
- Resin: Styrenated Epoxy Ester
- Drying Time: 12 hours light traffic / 72 hours heavy traffic
- Resistant to most oils, acids, alkalis and solvents
- Single component system

SAFE STEP 200
For application in areas of heavy vehicular traffic e.g. fork – lift truck ramps and loading bays
- Coverage: 5m² per pack (roller applied)
- Usable Life: 6 hours
- Curing Times: 24 hours light traffic / 48 hours heavy traffic
- Resistant to most oils, acids, alkalis, grease, oil, salt water and solvents
- Dual component system

SAFE STEP 500SF
For application in solvent sensitive areas e.g. breweries, food processing facilities, hospitals and confined areas
- Coverage: 2.7m² - 4.7m² per pack (roller applied)
- Usable Life: 30-40 minutes at 21°C
- Drying Time: 24 hours light traffic / 48 hours heavy traffic
- Dual component system
**SAFE STEP® ANTI-SLIP SPRAY**

ANTI-SLIP spray is a quick fix anti-slip coating ideal for small areas

- Transparent
- Suitable for interior and exterior use
- Suitable for pedestrian traffic
- Durability approximately 6 months, dependent on application
- Coverage: 1.5-2m² per 400ml aerosol
- Application temperature between 5-30°C

<table>
<thead>
<tr>
<th>PART CODE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>45000</td>
<td>400ml</td>
</tr>
</tbody>
</table>

**SAFE STEP MATRIX™**

Immediate anti-slip solution

The unique, patented grid design of SAFE STEP MATRIX enables both panels and treads to be cut quickly and easily on site to suit any particular layout.

Typical Applications:

- Slippery surfaces
- Ramps
- Workstations
- Walkways
- Stairs and steps
- Open mesh catwalks
- Chequer plate

SAFE STEP MATRIX is available as flat panels for flooring or treads for steps. It is also available in two colours, black and yellow

<table>
<thead>
<tr>
<th>SIZE</th>
<th>COLOUR</th>
<th>PART CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1150mm x 750mm</td>
<td>Black</td>
<td>43300</td>
</tr>
<tr>
<td>1150mm x 750mm</td>
<td>Yellow</td>
<td>43302</td>
</tr>
<tr>
<td>280mm x 1200mm</td>
<td>Black</td>
<td>43306</td>
</tr>
<tr>
<td>280mm x 1200mm</td>
<td>Yellow</td>
<td>43308</td>
</tr>
</tbody>
</table>
BIODEGRADABLE LUBRICANT FOR WIRE ROPES & ROV UMBILICALS

NO COMPROMISE ON PERFORMANCE
- Outstanding corrosion protection
- Advanced Pseudoplastic Rheology
- Ideal for use at extreme operating temperatures: -50°C to +180°C
- Highly resistant to water wash-off
- Excellent lubrication properties

NO COMPROMISE ON THE ENVIRONMENT
- Environmentally Acceptable
- VGP Compliant Lubricant
- Biodegradable
- Non-bioaccumulative
- Minimally Toxic
- No Sheen

Buy BIOGEN WIRESHIELD now

<table>
<thead>
<tr>
<th></th>
<th>Pail</th>
<th>Drum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Code:</td>
<td>20064</td>
<td>Part Code: 20069</td>
</tr>
<tr>
<td>Size:</td>
<td>18kg</td>
<td>Size: 160kg</td>
</tr>
</tbody>
</table>

BIOGEN WIRESHIELD

VGP

Biodegradable
Non-bioaccumulative
Minimally Toxic
No Sheen