



# **HEAVY INDUSTRY**





From product concept, design and development through to technical expertise and customer services, ROCOL® supports your lubrication needs.

Our wire rope products offer:

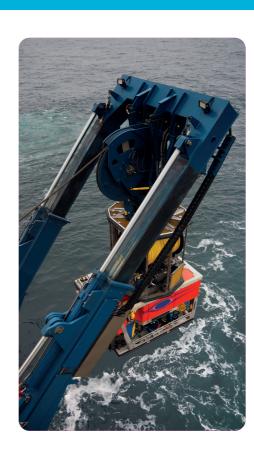
- ▶ Market-leading corrosion protection
- ▶ Maximum penetration and protection to the rope core with our unique technology

Our open gear products offer:

- Excellent resistance to corrosion and wear
- ▶ Optimum performance even under wet and damp conditions

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## **Heavy Industrial Lubricants For:**

- Marine
- Offshore
- Oil and Gas
- Mining
- Quarrying and Cement
- **▶** Construction
- Ports and Docks
- Lifting and Cranes

## Performance you can trust for Heavy Industrial applications



Working closely with customers means we understand the day to day challenges in keeping industry running. Our experience and expertise in product development means our advanced technology keeps your equipment maintained and protected to the highest standard to ensure your operations run effectively and efficiently.

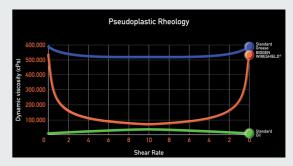
Our dedicated labs test to ISO, ASTM, BSI and IP standards so you can be assured that you're using the highest quality products.

## **Biodegradability**

**▶** Biodegradable Products

This is a measure of how quickly a lubricant would break down into its harmless constituents if released into the sea, rivers, dams or soil. In the instance of accidental discharge, a biodegradable lubricant will not remain in the environment for long periods of time which minimises the damage it can cause.

## **Pseudoplastic Rheology**



Application of shear forces or agitation causes a reduction in the dynamic viscosity of WIRESHIELD. This allows maximum penetration into the core of wire ropes and umbilicals, helping to increase pumpability during

automatic application and helps minimise blockages returning to grease consistency when shear is removed.

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## **BIOGEN®**

Offering next generation technology, our BIOGEN products are the ideal solution to the harsh demands found in heavy industrial environments. Designed specifically for use in offshore and subsea applications, our advanced BIOGEN wire rope and ROV umbilical lubricants offer maximum protection where environmental performance cannot be compromised.



## **BIOGEN WIRESHIELD**

**TEMP RANGE** -50°C to +180°C

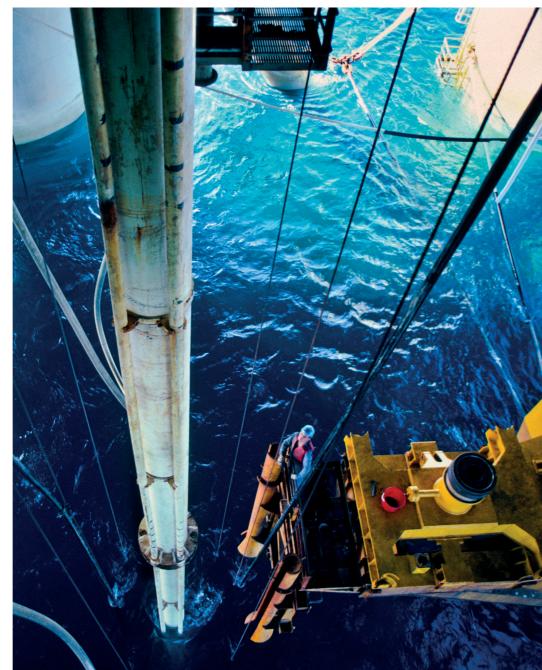


**BIOGEN WIRESHIELD** is a dark grey gel designed to immediately transform into a fluid consistency under shear to aid penetration into the core of the rope.

Market leading corrosion protection

- Ideal for use on ROV umbilicals
- ▶ Biodegradability, minimal eco-toxicity and low bioaccumulation potential
- Pseudoplastic rheology increases penetration of the lubricant - enhanced by the use of a high pressure applicator
- Excellent lubricating properties which reduces wear on wires and strands, ultimately maximising service life
- Highly stable in the presence of salt water, ensuring protection when exposed to sea water for extended periods of time

#### Part code Size 20064 18kg 20069 160kg



## **BIOGEN ROPE DRESSING**

**TEMP RANGE** -50°C to +180°C



Part code

20070

BIOGEN Rope Dressing is a soft, black, high performance wire rope lubricant designed to transform into a fluid consistency under shear to aid penetration into the core of the rope.

Outstanding corrosion protection

- ▶ High performance hydrophobic barrier
- For use in hottest and coldest climates
- VGP Compliant

## **BIOGEN FLUID**

**TEMP RANGE** -50°C to +180°C



**BIOGEN** Fluid is a high performance biodegradable grease in a biodegradable solvent carrier, featuring advanced pseudoplastic rheology.

Multi-purpose lubricant for use on wire ropes, chains, pulleys, springs, nuts and bolts

Industry leading corrosion protection

Excellent de-watering properties

> Suitable for use in active heave compensation as well as

Part code 20085

## **CORROSION PROTECTION TEST**



- 1 BIOGEN WIRESHIELD
- 2 COMPETITOR A
- 3 COMPETITOR B



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### **WIRE ROPE**

Our WIRE ROPE products have been developed to meet customer needs, offering a range of high-performance solutions to protect heavily loaded wire ropes in wet, dusty and hostile environments.



## WIRESHIELD

TEMP RANGE
-30°C to +100°C



Part code

20054

20058

Featuring pseudoplastic rheology, WIRESHIELD is designed to transform into a fluid like consistency under shear.

Outstanding corrosion protection

- Thin, non-tacky film prevents build up of dust and dirt
- ▶ Translucent film allows easier and more effective rope inspection
- Does not drip or fling off due to the pseudoplastic rheology







## **WIRE ROPE FLUID**

TEMP RANGE
-30°C to +100°C



Size

Part code

20045

A high performance de-watering wire rope fluid designed for complete lubrication and corrosion protection of most types of wire ropes, particularly in wet and hostile conditions.

Excellent de-watering properties

Complete internal and external corrosion protection

Protects against wear on guides and sheaves

Approved to NATO and Naval Standards

\*Image is a representative example and not the exact packaging

#### **WIRE ROPE DRESSING**

TEMP RANGE
-30°C to +100°C



Size

4kg

18kg

Part code

20024

A tenacious, semi-fluid, non-melting grease designed for complete lubrication and corrosion protection on most types of wire ropes, particularly in hostile conditions.

Excellent internal and external lubrication

Outstanding internal and external corrosion protection

Resistant to sea water

Approved to NATO and Naval Standards

## **WIRE ROPE SPRAY**

TEMP RANGE
-30°C to +100°C



Size

A high performance de-watering wire rope aerosol designed for complete lubrication and corrosion protection of most types of wire ropes, particularly in wet and hostile conditions.

Excellent de-watering properties

Resistant to sea water

▶ Complete internal and external corrosion protection

Protects against wear on guides and sheaves

nd corrosion 20015 400ml es, particularly

Part code

6/7





### **TUFLUBE**

Designed to reduce equipment failure and downtime, TUFLUBE open gear and jacking lubricants offer excellent resistance to corrosion and wear, even in damp and wet conditions.





## **TUFGEAR**

A heavy duty water resistant long life grease for the lubrication of all types and sizes of open gears.



Size

400g

5kg

18kg

Size

400ml

Part code

18302

18305

18304

## **BIOGEN TUFLUBE**

**TEMP RANGE** -60°C to +170°C



Part code

Size

18kg

BIOGEN TUFLUBE is an extreme heavy duty grease, designed to protect heavily loaded, slow moving mechanisms in the wettest and most corrosive conditions.

18404

- Unique additive package protects against metal wear
- Physical and chemical protection against pitting and corrosion
- ▶ Blend of Hi-Tac boosters ensures staying power, can even be applied when submerged
- Ideal for use in the hottest and coldest global climates

#### **TUFLUBE ALLWEATHER**

corrosive conditions.

**TEMP RANGE** -30°C to +70°C

TUFLUBE ALLWEATHER is a black extreme heavy Part code Size duty grease, designed to protect heavily loaded, slow 400g 18271 moving mechanisms in the wettest and most 18276 5kg 18244 18kg

- Unique additive package protects against metal wear
- Physical and chemical protection against pitting and corrosion
- Extremely resistant to water wash off, can even be applied when submerged
- ▶ Tough, tenacious, self-repairing film making it the ideal lubricant for heavily loaded sliding surfaces

TEMP RANGE

## **TUFLUBE EXTREME**

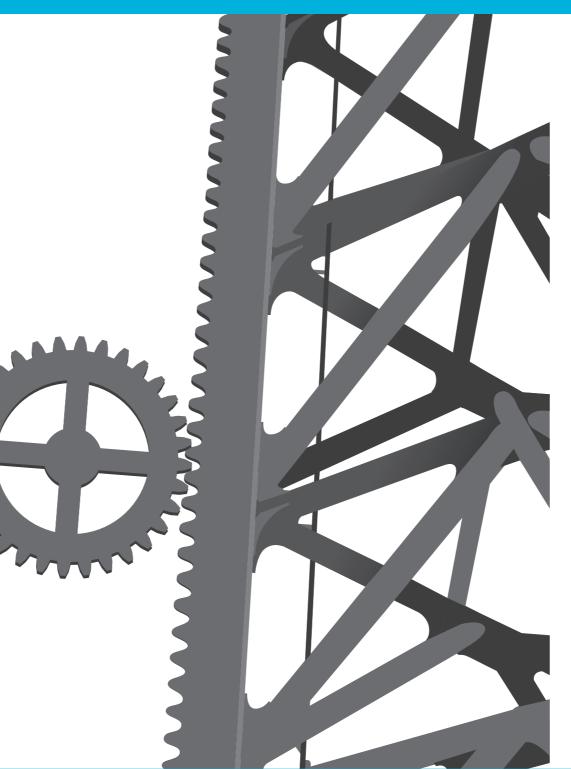
-50°C to +160°C



versatile and highly adhesive grease formulated for telescopic crane booms, protecting and lubricating them in the wettest and most corrosive conditions.

TUFLUBE EXTREME is a white extreme heavy duty,

- ▶ High load carrying capacity protecting against metal wear
- ▶ Highly water resistant, including protection against salt water
- Light coloured grease for high visibility and ease of inspection
- Tough, tenacious, self-repairing film making it the ideal lubricant for heavily loaded



## **TUFGEAR UNIVERSAL**

A heavy duty open gear grease containing a blend of high load carrying solids. TUFGEAR Universal is a highly water resistant, long life grease for the lubrication of all types and sizes of open gears.

Outstanding EP performance - protects gears from wear

- Excellent corrosion resistance to protect in humid, damp and even wet conditions
- Excellent adhesion to gear teeth no fling off
- Approved to NATO, Naval and RAF Standards

## TEMP RANGE

**TEMP RANGE** 

-40°C to +120°C

## -10°C to +100°C

A high viscosity, heavy duty open gear grease containing a blend of high load carrying solids to

Part code 18105

Excellent corrosion resistance to protect in humid, damp and even wet conditions

Outstanding EP performance

**TUFGEAR SPRAY** 

Thin film minimizes attraction of dust and dirt

provide excellent anti pitting properties.

Resistant to water - increases re-lubrication intervals

#### **TUFGEAR 100**

-30°C to +120°C

TEMP RANGE



Heavy-duty open gear lubricant for demanding applications. Developed for the lubrication of large girth gears and other open gears particularly where automatic lubrication systems are used.

Designed for use on rotary kilns and waste pulverisers

- Outstanding EP performance
- Good adhesion to the gear teeth-no fling off
- Excellent water resistance

Part code Size 185kg

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# WIRE ROPE SELECTOR



# OPEN GEARS SELECTOR





|                                  |                              | BIOGEN WIRESHIELD             | BIOGEN ROPE<br>DRESSING | BIOGEN Fluid    | WIRESHIELD                    | WIRE ROPE<br>DRESSING       | WIRE ROPE<br>FLUID   | WIRE ROPE<br>SPRAY      |
|----------------------------------|------------------------------|-------------------------------|-------------------------|-----------------|-------------------------------|-----------------------------|----------------------|-------------------------|
|                                  | ROV / submerged ropes        | ***                           | ***                     | *               | **                            | *                           | *                    | *                       |
|                                  | Ship Lifts                   | ***                           | ***                     | ***             | ***                           | ***                         | **                   | *                       |
| YPICAL APPLICATIONS /<br>SYSTEMS | Ship to Shore Cranes         | ***                           | ***                     | *               | ***                           | ***                         | *                    | *                       |
|                                  | Onshore cranes               | **                            | **                      | **              | ***                           | ***                         | **                   | ***                     |
|                                  | Static Ropes                 | **                            | **                      | ***             | **                            | **                          | ***                  | ***                     |
|                                  | Manual                       | ***                           | ***                     | ***             | ***                           | ***                         | ***                  | -                       |
| APPLICATION METHOD               | Automatic lubricator         | ***                           | ***                     | **              | ***                           | **                          | **                   | -                       |
| AFFLICATION METHOD               | Dip                          | -                             | -                       | ***             | -                             | *                           | ***                  | -                       |
|                                  | Aerosol                      | -                             | -                       | -               | -                             | -                           | -                    | ***                     |
|                                  | Biodegradable                | •                             | •                       | •               | -                             | -                           | -                    | -                       |
|                                  | VGP                          | -                             | •                       | -               | -                             | -                           | -                    | -                       |
| ENVIRONMENTAL                    | Corrosion Resistance         | ***                           | **                      | ***             | ***                           | **                          | **                   | **                      |
|                                  | Water Wash-Off<br>Resistance | ***                           | **                      | *               | ***                           | **                          | *                    | *                       |
| TEMPERATURE RANGE                |                              | -50°C to +180°C               | -50°C to +180°C         | -50°C to +180°C | -30°C to +100°C               | -30°C to +100°C             | -30°C to +100°C      | -30°C to +10            |
| PENETRATION                      |                              | ***                           | ***                     | ***             | ***                           | ***                         | ***                  | ***                     |
| APPEARANCE                       |                              | Soft black/grey grease        | Soft black grease       | Dark grey fluid | Soft translucent amber grease | Soft grey/black grease      | Grey/<br>black fluid | Soft grey/bla<br>grease |
| PART CODE                        |                              | 18kg - 20064<br>160kg - 20069 | 18kg – 20070            | 20L - 20085     | 18kg - 20054<br>160kg - 20058 | 4kg - 20026<br>18kg - 20024 | 20L - 20045          | 400ml - 200             |
|                                  |                              | BIOGEN 1998.                  | BIOGEN<br>Burkens       | BIOGEN          | WARED                         | WIRE ROPE                   | WIRE ROPE Fluid      | west sort               |

| *Image is a representative | e example and | not the exact | packaging |
|----------------------------|---------------|---------------|-----------|
|----------------------------|---------------|---------------|-----------|

|                                   |  | BIOGEN TUFLUBE  | TUFLUBE<br>ALLWEATHER                       | TUFLUBE EXTREME               | TUFGEAR UNIVERSAL / SPRAY                                    | TUFGEAR 100           |
|-----------------------------------|--|-----------------|---|-------------------------------|--|-----------------------|
|                                   | Jack Up Rigs   | ***             | ***   | **                            | *  | -                     |
|                                   | Cement Kilns   | *               | *   | *                             | ***  | ***                   |
| TYPICAL APPLICATIONS /<br>SYSTEMS | Rising Spindle<br>Applications<br>i.e. Penstocks / Sluice<br>Gates | **              | ***   | ***                           | *  | **                    |
|                                   | Crane Booms  | *               | ***   | ***                           | *  | -                     |
|                                   | Rack & Pinion  | ***             | **  | **                            | ***  | **                    |
|                                   | Worm   | **              | ***   | ***                           | ***  | ***                   |
| GEAR DESIGN                       | Girth Gear   | **              | **  | **                            | ***  | **                    |
|                                   | Spur   | **              | ***   | ***                           | ***  | ***                   |
|                                   | Bevel  | **              | **  | **                            | ***  | **                    |
|                                   | Manual   | ***             | ***   | ***                           | ***  | **                    |
|                                   | Automatic lubricator   | **              | **  | **                            | *  | ***                   |
| APPLICATION METHOD                | Sump   | -               | *   | -                             | -  | ***                   |
|                                   | Aerosol  | -               | -   | -                             | ***  | -                     |
|                                   | Biodegradable  | •               | -   | -                             | -  | -                     |
|                                   | HOCNF E  | •               | -   | -                             | -  | -                     |
| ENVIRONMENTAL                     | Corrosion Resistance   | ***             | ***   | ***                           | ***  | ***                   |
|                                   | Water Wash-Off<br>Resistance                                       | ***             | ***   | ***                           | ***  | **                    |
| TEMPERATURE RANGE                 |  | -60°C to +170°C | -30°C to +70°C                              | -50°C to +160°C               | -40°C to +120°C  | -30°C to +120°C       |
| APPEARANCE                        |  | Beige grease    | Smooth black grease                         | Smooth off white grease       | Smooth black adhesive grease                                 | Soft dark grey grease |
| PART CODE                         |  | 18kg - 18404    | 400g - 18271<br>5kg - 18276<br>18kg - 18244 | 4.5kg – 18176<br>18kg - 18174 | 400ml - 18105<br>400g - 18302<br>5kg - 18305<br>18kg - 18304 | 185kg – 18219         |
|                                   |  | BOOK (I) LIES   | TUFLUBE Allowabler                          | TUTUBLE Extreme               | TURGEAR Servi  | BOCCI<br>Emm.         |

**KEY TO PERFORMANCE** - NOT SUITABLE ★ GOOD ★★★ VERY GOOD ★★★ EXCELLENT

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# Gearbox & Hydraulic Oils

## **ANTI-SEIZE & ASSEMBLY**

ANTI-SEIZE & ASSEMBLY products are applied to bolts, fasteners, flanges and other clamped interfaces to prevent galling, seizing and corrosion, as well as lubricating to ease



## SAPPHIRE® HI-TORQUE

SAPPHIRE HI-TORQUE is a range of semi-synthetic gear oils that minimise wear, thereby reducing risk of breakdown and significantly extending gear box life.

### SAPPHIRE® HI-POWER

SAPPHIRE Hi-Power is a range of hydraulic, compressor and airline oils, designed to maximise power transfer whilst lubricating and dissipating heat to protect machinery and extend equipment life.





**ANTI-SEIZE COMPOUND & SPRAY** 

**TEMP RANGE** -10°C to +1100°C



ANTI-SEIZE Spray is a copper-based, lead-free anti-seize aerosol, reinforced with graphite and molybdenum disulphide to further enhance its performance.

Prevents pick-up and seizure

Excellent water resistance, even when submerged

Designed for use on all static fasteners and mechanisms prone

▶ Highly resistant to salt water environments

| Part code | Size         |
|-----------|--------------|
| 14015     | 400ml        |
| 14030     | <b>85</b> g  |
| 14033     | <b>500</b> g |
| 14035     | 6kg          |
| 14038     | 18kg         |
|           |              |



#### PENETRATING SPRAY

PENETRATING Spray is a powerful release agent for corroded threaded fasteners and other seized components.

Size Part code 14021 300ml

- Provides excellent penetration in seized or corroded fasteners even after prolonged
- Provides efficient loosening of fasteners when seized due to rust, scale, dirt, grime etc.
- Dispensed via a powerful jet spray which penetrates rust and debris
- ▶ The fast acting formulation minimizes time and effort when dealing with seized fasteners



Part code

10025

Size

400ml

#### **DRY MOLY SPRAY**

**TEMP RANGE** -50°C to +450°C

DRY MOLY Spray is a high purity, extreme load dry film molybdenum disulphide spray designed for use where a wet lubricant cannot be tolerated.

- > Prevents galling, pick-up and seizure
- Resistant to high loads (up to 7,000 kg/cm2)
- Excellent wear resistance
- Fast drying





## **SAPPHIRE HI-TORQUE**

**TEMP RANGE** -20°C to +120°C



- ▶ Reduces wear to significantly extend gear box life
- ▶ Contains unique SUPS\* technology to protect gear teeth on start-up
- High performance, even under extreme pressure
- Decreases oil change frequency, reducing total cost of ownership

| <b>Description</b><br>Hi-Torque 150 | Part code<br>21055<br>21059 | <b>Size</b> 20l 200l | <b>Description</b><br>Hi-Torque 320 | Part code<br>21025<br>21029 | <b>Size</b> 201 2001 |
|-------------------------------------|-----------------------------|----------------------|-------------------------------------|-----------------------------|----------------------|
| <b>Description</b><br>Hi-Torque 220 | Part code<br>21015<br>21019 | <b>Size</b> 201 2001 | <b>Description</b><br>Hi-Torque 460 | Part code<br>21035          | Size<br>20l          |
|                                     |                             |                      | <b>Description</b><br>Hi-Torque 680 | Part code 21045             | Size<br>20l          |

<sup>\*</sup>Start Up Protection System

## **SAPPHIRE HI-POWER**





- ▶ High thermal stability increases oil change intervals and prevents sludge formation
- Low carry-over system eases air and oil separation, ensuring clean air and maximum
- Available in a range of viscosities for all pneumatic and hydraulic applications

| Description<br>Sapphire<br>Hi-Power 32 | Part code<br>52545<br>52549 | Size<br>201<br>2001 | <b>Description</b> Sapphire Hi-Power 68  | Part code<br>52565<br>52569 | <b>Size</b> 201 2001 |
|--|-----------------------------|---------------------|--|-----------------------------|----------------------|
| Description<br>Sapphire<br>Hi-Power 46 | Part code<br>52555<br>52559 | Size<br>201<br>2001 | <b>Description</b> Sapphire Hi-Power 100 | Part code<br>52575<br>52579 | <b>Size</b> 201 2001 |

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## Bearing Greases

## Bearing Greases & Corrosion Protection

### **SAPPHIRE®**

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





Part code

12761

12765

12764

Part code

12441

12446









TEMP RANGE

-30°C to +160°C

**SAPPHIRE 2,1,000** 

SAPPHIRE is designed for medium to heavy duty ball, roller and plain bearings. They are ideal for use in slower moving bearings operating under extreme conditions such as shock loads and wet environments found in all types of industrial applications.

Triple life bearing grease

Extreme load and wear performance

Extended lubrication intervals

Revolutionary multi complex grease

| Description  | Part code | Size  |
|--------------|-----------|-------|
| Sapphire 2   | 12171     | 400g  |
| • •          | 12176     | 5kg S |
|              | 12175     | 18kg  |
|              | 12178     | 50kg  |
|              | 12179     | 185kg |
| Description  | Part code | Size  |
| Sapphire 1   | 12601     | 400g  |
| • •          | 12614     | 18kg  |
|              | 12609     | 185kg |
| Description  | Part code | Size  |
| Sapphire 000 | 12284     | 18kg  |

TEMP RANGE

**SAPPHIRE EXTREME** 

-10°C to +235°C



| SAPPHIRE Extreme is a high performance, long life   | Part code | Siz  |
|---|-----------|------|
| bearing grease for use in extreme environments.   | 12211     | 400  |
| <ul> <li>A non melting grease, provides outstanding performance at<br/>high temperatures</li> </ul> | 12216     | 5kg  |
|   | 12214     | 18k  |
| <ul> <li>Excellent resistance to vibration and shock loads</li> </ul>                               | 12218     | 50k  |
| Extreme load and wear performance   | 12219     | 160k |
| ▶ Highly water resistant, provides outstanding corrosion protecti                                   | ion       |      |

## **SAPPHIRE HI-LOAD 2**

-30°C to +150°C

**TEMP RANGE** 

Size

400g

5kg

18kg

SAPPHIRE Hi-Load 2 is a long life, soap thickened bearing grease particularly suited for slow moving bearings subjected to heavy loads, shock and

Protects equipment under extreme conditions

Ideal for shock loads and vibration

Incorporates molybdenum disulphide (MoS2) which has a natural affinity to metal

MoS2 can provide emergency dry lubrication where required

**TEMP RANGE** 

#### -30°C to +160°C **SAPPHIRE ADVANCE 2**



Size

380q

18kg

**SAPPHIRE Advance 2 is the ultimate multi-purpose** grease offering outstanding performance when compared to other conventional greases, excelling in high speed applications such as electric motors and fan bearings.

High speed applications such as fan and motor bearings

Extended lubrication intervals

**Z30 SPRAY & FLUID** 

Good corrosion resistance

Fortified with PTFE

TEMP DANCE



| ILMI    | NAN  | GE   |
|---------|------|------|
| -20°C t | o +1 | 10°C |

Z30 is a corrosion inhibitor spray offering a heavy duty waxy film for long term outdoor corrosion protection of various machinery parts and pieces of equipment in convenient aerosol form. Heavy duty waxy film for long term outdoor corrosion protection of various machinery parts.

Thin, flexible film - does not crack or chip

▶ Heavy duty, waxy film for long term corrosion protection

▶ Excellent corrosion protection outdoors for up to 2 years

Good de-watering properties and penetration

Part code 300ml 37020 **5**l 37022 37028 **20**l

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