

# Ambersil

## ESSENTIAL TOOL BOX CHEMICALS



LUBRICATION &  
MAINTENANCE

# Ambersil

www.ambersil.com

@AmbersilMRO

YOUR COMPLETE CHEMICAL SOLUTION™

## CLEANERS & DEGREASERS



### AMBERCLENS

- Multipurpose foaming cleaner
- Use to remove general grime and soiling on all hard surfaces or on upholstery to gently lift out grime
- Quick and easy use. Spray on, wipe off
- Anti-static formulation inhibits dust attraction



31592-AA



31593-AA



31594-AA (NON-FLAM)



31759-AB



### DEGREASER RTU

- Use to degrease components when a regular solvent cleaner cannot be used
- Removes tough, stubborn soiling such as heavy oil, grease, grime, silicones, wax and old lubricants
- Safe for use on most plastics, rubber and painted surfaces
- Available as Low Foam (LF) for automated applications
- Contains a highly effect corrosion inhibitor to help prevent flash rusting



31464



32090



31765 (LF)



31763



31764



31766 (LF)



### LABEL REMOVER

- An optimum blend of solvent and citrus active ingredients penetrate paper labels rapidly
- Reduces need for scraping and the potential damage that may cause
- Improves packaging line efficiency by reducing jamming caused by label and adhesive build-up
- Pleasant citrus smell
- Test plastics compatibility prior to use



31629

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com



# Ambersil

[www.ambersil.com](http://www.ambersil.com)

@AmbersilMRO

**YOUR COMPLETE CHEMICAL SOLUTION™**

## CLEANERS & DEGREASERS



### AMBERKLENE FE10

- Fast and effective solvent degreaser for use on chains, gears, cogs, motors and more
- Fast evaporation that does not leave a residue
- Powerful flushing action, rapidly removes contaminants
- Safe for use on ferrous and non-ferrous metals and most plastics



31553-AA



32116-AA



31563-AF



30308-AA



31697-AA



### AMBERKLENE ME20

- Heavy-duty cleaner for extra stubborn soiling which requires a longer contact time
- Leaves a clean, dry surface
- Removes heavy deposits of oil and grease, waxes and silicones
- Higher flash point of +41°C



31554-AA



31636-AB



31698-AA



30309-AA



### AMBERKLENE L030

- Use for general light degreasing on bearings, motors, gears and chains without the traditional odour associated with solvent degreasers
- Safe for use on ferrous and non-ferrous metals, most painted surfaces, and most plastics
- Will not stress-crack acrylic
- Listed in British Airways 'Standard Practice' manual. Meets US Federal Spec. TT-N-95Bv Type 2; and is approved by Ford Motor Company (Tox: 166741)



31555



31699



31700



31701

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com



# Ambersil

www.ambersil.com

@AmbersilMRO

YOUR COMPLETE CHEMICAL SOLUTION™

## CLEANERS & DEGREASERS



### BRAKE CLEANER

- Effectively removes brake fluid, grease, oil and hardened deposits instantly
- Safe on metals, most plastics, coatings and rubbers (always test prior to use)
- Removes anti-corrosion coating on new brake discs prior to fitting
- Reduces disc-brake squeal and clutch



30282-AA



31772-AA



### AMBERSOLV SB1

- A solvent degreaser with added citrus power for use on grease and grime that may contain multiple contamination types. Ideal for use in the printing industry
- Safe for use on most plastics and all metals
- Effective on a wide range of soiling such as: oil, grease, tar, bitumen, silicones, rubber-based adhesives, oil-based paints, inks and dyes
- Military & Aviation approved



31598



31785



31786

## My Ambersil

### A Step By Step Guide

1 Navigate to www.ambersil.com

2 Click on the My Ambersil logo

3 Select the link "New user: register"

4 Fill in company details and up to 5 email addresses

5 The unique log-in ID and password will be emailed to you

6 Enter the log-in ID and password on the My Ambersil homepage

7 Once logged in, select the country from the drop-down list at the top of the page (e.g United Kingdom)

8 No products will be displayed yet as My Ambersil defaults to your selected products. To add products, simply untick the 'My Selection' box

9 The complete list of Ambersil products will now be displayed - using the selection boxes on the right, both MSDS and TDS updates can be selected

10 Select the Ambersil products of interest, by navigating through each page. My Ambersil remembers your selection as you move between pages, but it needs to be 'saved' by clicking 'update' before closing the website

11 If product selection needs to be modified, simply log-in to My Ambersil and change the update options (click on the My Ambersil logo to update email preferences)

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com



# Ambersil

[www.ambersil.com](http://www.ambersil.com)

@AmbersilMRO

**YOUR COMPLETE CHEMICAL SOLUTION™**

## WIPES



### TOUGH WIPES

- Highly effective on a range of soiling types tar, resins, oils, paints and more
- Cleaner and towel together in one convenient wipe
- Contains anti-pathogen agents effective against common bacteria and viruses such as Weil's Disease, MRSA and E. Coli

30 30766-AA

100 30767-AC



### HAND CLEANING WIPES

- Use for cleaning light to medium grime from hands, tools and equipment
- Economical hand cleaning
- Combats common germs
- Keeps expensive hand-tools clean

150 31798-AA



### ENGINEERS WIPES

- High quality, extremely low lint dry wipes for use with all Ambersil solvents, cleaners, lubricants.
- Excellent wet strength - resists tearing and can be reused
- Tear resistant and "non-linting"
- Ideal for use on delicate surfaces: computer monitors, touch screens, LCD/plasma screens, and more
- Suitable for use with all Ambersil chemicals
- Highly absorbent

50 31797

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com

# Ambersil

www.ambersil.com

@AmbersilMRO

**YOUR COMPLETE CHEMICAL SOLUTION™**

## LUBRICANTS



**40+**

- An engineers essential 'cure-all' product
- Quickly frees seized nuts, bolts and fasteners
- High corrosion protection and water displacement properties
- Safe on most paints, plastics and rubbers



31563-AA



31532-AC



31711-AA



31712-AA



**PX24**

- Meets military specification Def. Stan 68-10 Issue 5 PX24
- Zero copper corrosion: IP 154, max 1: no pitting or etching
- Operational temperature range: -20°C to +115°C
- Rolls Royce Aerospace Approved: 1042E
- AgustaWestland approved: WHPS: 158
- Fitted with a 360o Spray System for all angle use



31565



31705



31706



31707



**AMBERGLIDE**

- Use where temperatures regularly reach a sustained +120C to +160C
- Provides long lasting durable film
- Significantly increases re-lubrication intervals
- PTFE fortified lubricant
- Displaces moisture



31571-AA

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com

# Ambersil

www.ambersil.com

@AmbersilMRO

YOUR COMPLETE CHEMICAL SOLUTION™

## LUBRICANTS



### PENETRATING OIL

- Frees seized components rapidly
- Lubricates fine and close tolerance threads
- Contains MoS<sub>2</sub>
- Softens rust and carbon deposits



30240-AA



32117-AA



### SILICONE LUBRICANT

- Odourless, colourless and non-staining
- Exhibits excellent slip properties on blades, tables, chutes and conveyors
- Safe on wood, glass, fabrics, metals, rubbers and most hard surfaces
- WRAS approved



31631-AA



### CHAINSPRAY

- Molybdenum Disulfide (MoS<sub>2</sub>) fortified chain lubricant
- Offers maximum adhesion to chain links with excellent penetration
- Resists 'water wash off' and dust absorption
- High temperature resistance up to +200C
- Ideal for fast moving or exposed chains



31575-AA

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com



# Ambersil

www.ambersil.com

@AmbersilMRO

YOUR COMPLETE CHEMICAL SOLUTION™

## LUBRICANTS



31573

### DRY FILM ANTI-STICK

- The high level of PTFE in the dry film provides excellent anti-friction and slip performance to all sliding surfaces
- Excellent materials compatibility
- Suitable for use as an anti-tracking agent
- The dry film is unaffected by oil or solvents
- Operational Temperature range: -100°C to +200°C



31576-AA

### DRY MOLY SPRAY

- Use in higher load applications where PTFE lubricants would fail, but a dry film is still required
- Tough and long lasting
- Operational temp range: -150C to +400C
- Use as a running-in treatment on rolling and sliding bearings



30303-AA



30239-AA

### COPPER ANTI-SEIZE

- Use on threaded fasteners to prevent seizing during prolonged maintenance intervals
- Reduces friction and wear
- Formulated with micro-ionised copper and anti-oxidant additives
- Good protection even in highly corrosive environments

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com



# Ambersil

www.ambersil.com

@AmbersilMRO

YOUR COMPLETE CHEMICAL SOLUTION™

## LUBRICANTS



32500

### BLUE ADHESIVE LUBRICANT

- Penetrates upon application then thickens
- Ideal for applications where shock loading occurs
- Highly visible blue colour upon application for visible coverage, which then turns transparent after a few days
- Temperature range: -12°C to +150°C (180°C intermittent)



31583-AA

### GEAR & WIRE ROPE LUBRICANT

- Deep penetration for internal protection of wire ropes
- Forms a dry non-peeling film that overcomes the limitations of grease lubrication
- Can be applied to gears in motion and is suitable for all running speeds



30304-AB



31574-AA

### AMBERGREASE EXL

- Highly visible red, NLGI type 2 grease, Lithium-Calcium Complex thickened
- Suitable for use in all types of anti-friction sliding surfaces and plain bearings
- Exceptional load carrying capacity: 4-ball weld load >800Kg
- Use on critical and high load bearings and sliding surfaces

LUBRICATION & MAINTENANCE

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com

# Ambersil

www.ambersil.com

@AmbersilMRO

YOUR COMPLETE CHEMICAL SOLUTION™

## GENERAL MAINTENANCE



### TUFCUT RANGE

- Range of specialist metal cutting lubricants based on a mixture of lubricants, extreme pressure additives and anti-oxidants
- Ready-to-use products that provide exceptional performance in demanding applications
- Suitable for use on a wide range of metals, including stainless and high carbon steels.



31579-AA (SPRAY)



31580-AA (LIQUID)



31581-AA (COMPOUND)



30313-AA (AQUA)



31582-AA (FOAM)



31723-AA (LIQUID)



31724-AA (COMPOUND)



30314-AA (AQUA)



### LEAK DETECTOR

- Water-based formulation, no oils, silicones or harmful solvents; no 'run-off' hazard
- Non-flammable and completely odourless
- Ideal for preventative maintenance checks, new installation checks, and on all HVAC systems



31633-AA



31781-AA



### EASY WELD

- Biodegradable solvent anti-spatter
- Easy removal of spatter by light brushing after welding
- Economical in use due to its thin film performance
- Helps keep treated nozzles clear for optimal gas flow
- Non-silicone, heat resistance barrier



30287-AA



### FLAW DETECTORS

- Highly effective system that can be used anywhere, simply, and without complicated test equipment
- Simple, economical and cost effective
- Can be applied direct to the component to be tested without the need for dismantling
- Fast acting visual results

CLEANER



30288-AA

PENETRANT



30289-AA

DEVELOPER



30290-AA

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com

# Ambersil

www.ambersil.com

@AmbersilMRO

YOUR COMPLETE CHEMICAL SOLUTION™

## ANTI-CORROSION



### GALVA COLOUR

- 2-in-1 anti-corrosion primer and colour top coat
- Easy application with fast results
- Ideal for external pipe-line identification, railings, security fences, and storage tanks
- RAL colours for accurate colour matches

	20673-AA		20679-AA
	20674-AA		20680-AA
	20675-AA		20681-AA
	20676-AA		
	20677-AA		
	20678-AA		



### ACRYLIC PAINTS

- RAL referenced for accurate colour matches
- Fast drying <5 minutes
- Good flexibility and hardness
- Once dry it has a high UV resistance
- Available in 400ml spray can

	20180-AA MATT BLACK
	20181-AA MATT WHITE
	20182-AA GLOSS BLACK
	20183-AA GLOSS WHITE

	32060-AA SATIN BLACK		20555-AA		20191-AA
	20184-AA		20556-AA		20192-AA
	20185-AA		20557-AA		20193-AA
	20186-AA		20558-AA		20194-AA
	20187-AA		20559-AA		
	20188-AA		20189-AA		
	20195-AA		20190-AA		

### MARKER PEN



- Use for metal working/fabrication, electrical installations, machine construction, civil engineering, or general component identification and quality control checks
- Tenacious resin binds paint to the writing surface almost eliminating the problems associated with accidental rub-off and will not wash off with water/rain

	20394-AA		20399-AA		20387-AA		20364-AA
	20379-AA		20368-AA		20383-AA		

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com

# PREVENTION. NOT DETECTION.™



Available from Ambersil

## LOCKED IN FOR SAFETY

### INTEGRATED DESIGN BENEFITS:

- Secure spray straw locks in place
- Non-slip grip
- Traditional spray in the “down” position
- Precision application in the “up” position
- Useful catch curb - prevents oily can

Perma-Lock® is a unique, non-detachable spray system with dual position spray.

There are no detachable pieces that can fall off, leading to contamination of goods and exposing food manufacturers and processors to costly recalls.

Perma-Lock® reduces the need for expensive x-ray or metal detection equipment:

**preventing loss** is better than **detecting loss**.

## You Just Can't Lose!™

**Ambersil**

[www.ambersil.com](http://www.ambersil.com)

[@AmbersilMRO](https://twitter.com/AmbersilMRO)

[sales.uk@ambersil.com](mailto:sales.uk@ambersil.com)



FM26077

EMS60742

©2017 CRC Industries UK





# Ambersil

www.ambersil.com

@AmbersilMRO

YOUR COMPLETE CHEMICAL SOLUTION™

## FOOD GRADE CLEANERS & DEGREASERS



 30251

### INDUSTRIAL DEGREASER FG



- Formulated for use in the food/ beverage industry to tackle 'difficult' degreasing applications.
- Excellent general purpose solvent degreaser
- NSF A8 and K1 registered (No140255 and 140250)
- Powerful flushing action with superior wetting properties ensures excellent results
- Zero residue

 30252



 30243

### DEGREASER FG



- Use to degrease components when a regular solvent degreaser cannot be used.
- Formulated specifically for use in the food/beverage industry for risk reduction.
- NSF A1 registered (No137997)
- Readily biodegradable and non-flammable
- Effective in both hot and cold water
- Use on gearbox housing, hydraulic systems, large panels, and even walls and floors.
- Concentrated for convenience and economy
- Non-flammable



 32325

### HARD SURFACE SANITISING WIPES FG



- Kills common pathogens such as: Staphylococcus aureus, E.Coli, Pseudomonas aeruginosa, and Enterococcus hirae
- Highly visible blue wipes for contamination risk reduction
- NSF D2 registered (No147561)

LUBRICATION & MAINTENANCE

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com

# Ambersil

www.ambersil.com

@AmbersilMRO

YOUR COMPLETE CHEMICAL SOLUTION™


## FOOD GRADE CLEANERS & DEGREASERS



### LABEL & ADHESIVE REMOVER FG



- Use to remove labels from shipping containers, packing boxes and bulk storage
- NSF K3 registered
- Removes paper labels in 3 mins
- Improves packaging line efficiency by reducing jamming caused by label and adhesive build-up

 30254-AA



### CONTACT CLEANER FG



- NSF K2 registered
- Use to remove grime and contamination from PCB's and contacts
- Non-conductive and non-corrosive
- Prolongs the life expectancy of components
- Reduces voltage drops due to contamination

 31588-AA



### UNIVERSAL SCREEN CLEANER



- Removes finger-marks and contamination from visual display units (VDU's) such as LCD monitors, production control screens, and all monitors. Ideal for cleaning thermal imaging camera screens.
- Can be used on most screen types (LCD, TFT, Plasma, etc.)
- Exceptionally economical in use
- NSF P1 registered (No147407)

 30236

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com





# Ambersil

www.ambersil.com

@AmbersilMRO

YOUR COMPLETE CHEMICAL SOLUTION™

## FOOD GRADE LUBRICANTS



### MACHINE OIL FG



- NSF H1 registered for use on metal-to-metal moving parts such as hinges
- Can be used as an anti-corrosion coating for metal in high humidity conditions
- Creates a highly effective lubricating and anti-friction film



30247-AA



30255-AA



### PENETRATING OIL FG



- For use in the food & beverage industry on fasteners seized by heat, corrosion, over-tightening and contamination
- NSF H1 registered (No140260)
- Spray on, allow to penetrate, and remove seized fasteners without damaging the head, thread or risk shearing
- Does not contain silicone
- Safe for use on all metals



30256



### SILICONE FG



- NSF H1 registered for use in the food and beverage industry
- Eliminates squeaking, binding and sticking
- Highly water-resistant and repels water from treated areas
- Use on high-speed bagging lines and on chutes/slides



30248-AA

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com

# Ambersil

www.ambersil.com

@AmbersilMRO

YOUR COMPLETE CHEMICAL SOLUTION™

## FOOD GRADE LUBRICANTS



### DRY PTFE LUBE FG



- A fine, dry PTFE lubricant for the general lubrication of moving parts where an oily or silicone lubricant cannot be used
- NSF H1 registered (No139899)



31589

- Excellent materials compatibility
- Deposits a dry, non-staining film of pure PTFE
- The dry film is unaffected by oil and solvents
- Operational Temperature range: -100°C to +200°C



### CHAIN LUBE FG



- NSF H1 PTFE chain lubricant for use above the food line
- Excellent penetration and lubrication properties



30245-AA



30278-AA

- Can be used as a general, heavy duty, PTFE lubricant
- Leaves a tenacious, long lasting lubricating film



### AMBERGREASE FG1



- NSF H1 registered, white, NLGI type 2, aluminium complex grease
- Very good extreme pressure performance: 4-ball weld load: >200Kg
- Ideal for all types of bearings and rails surfaces in low temperature areas
- Use in areas subjected to moist or wet operating conditions



31584-AA



### AMBERGREASE FG2



- NSF H1 registered, translucent, NLGI type 2 silicone grease
- Operational temp. range: -20C to +220C
- Shell Four Ball Weld Load (IP 239): 180Kg
- Use on bearings subjected to high temperatures such as oven conveyors, oven fan bearings and bakery lines



31585-AA

## ASK ABOUT OUR FOOD GRADE (NSF H1) HYDRAULIC AND GEAR OILS

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com



# POLIPUMP

## YOUR OWN CENTRALISED LUBRICATION SYSTEM IN JUST A FEW QUICK STEPS



With You

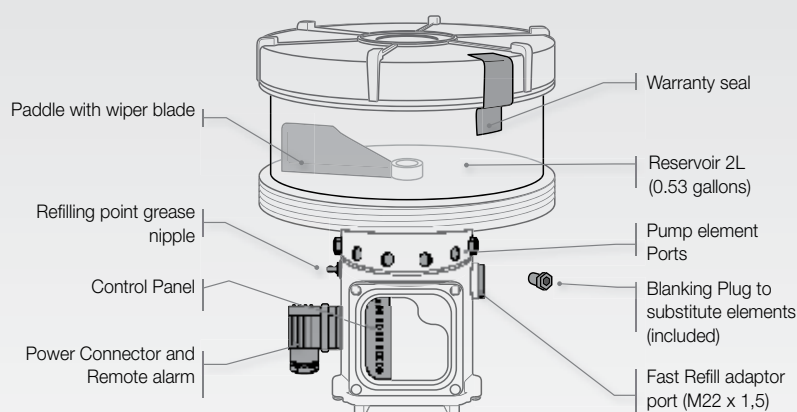
- **PROFITABILITY**
- **POWERFUL**  
and **ECONOMICAL** solution
- **EASY** set up and **ECOLOGICAL**



### SET UP YOUR OWN MULTIPOINT LUBRICATION SYSTEM IN 4 BASIC STEPS

- 1 How many points do need to lubricate?** determine the type of pumping elements required and connect to the pump
- 2 Connect the pump** to the power supply
- 3 Fill the reservoir** using our filling tool kit and the grease of your choice
- 4 Set up the timer according to your lubricant needs** and the pump is ready to start

### TECHNICAL INFORMATION



Also available, our range of high quality lubricants dedicated for use with bearings and fully compatible with the POLIPUMP.



#### 3 PUMP MODELS

- 1-12 pumping elements
- 1-24 pumping elements
- 1-35 pumping elements
- 12VDC or 24VDC
- 6 different pumping elements  
0,02CC – 0,03 CC – 0,04CC – 0,08 CC – 0,10 CC – 0,13 CC
- 12 timer settings
- 2 liter reservoir
- Grade of grease to be used: NLGI 00 to NLGI 2
- Working temperature: -10°C to + 60 °C
- Protection class: IP 65
- Maximum pressure: 80 bar

#### A range of accessories is also available:

- 2 hoses (with or without grease)
- 6 connectors
- Cartridge filling kit



# READY BOOSTER

## THE SINGLE POINT LUBRICATOR



From NTN-SNR



With You



### READY BOOSTER BENEFITS

- Significant savings due to the flexibility of use (1-12 months and stoppable)
- Suitable for tight and restricted areas (125 cm<sup>3</sup>)
- Ready to use: no assembly and no tools required
- Only one lubricator for all of your applications: inside and outside (-20°C up to 60°C)
- IP68 protection class: Reliable lubrication even in extremely moist and dusty areas

### APPLICATIONS

Due to its compact size, the Ready Booster can be used in various applications:

- Bearings, Plummer block
- Chains
- Electrical motors, fans, pumps, conveyors, etc.



### ATEX CERTIFIED



II 1G Ex ia IIC T6  
II 1D Ex iaD 20 T85°C  
I M1 Ex ia I

> FOR YOUR APPLICATION, COMBINE THE MOST SUITABLE GREASE WITH THE BEST AUTOMATIC LUBRICATION



### UNIVERSAL +



### HEAVY DUTY +



### VIB



### HIGH TEMP



### FOOD



### FOOD CHAIN OIL



### CHAIN OIL

### DESCRIPTION

General purpose grease for industrial use

Suitable for very high loads, compatible with many applications, intended for arduous applications

Parts subject to extensive vibrations or impact. For high-load applications in humid environments.

This grease is ideal for long-term lubrication at high temperatures up to +150°C. Accepts peaks of +175°C

Multi-purpose grease for the food and pharmaceutical industries. Complies with NSF-H1 recommendations

Food-grade oil for chains designed for the food-processing and pharmaceutical industry. Complying with NSF-H1 recommendations

Synthetic oils for high temperature chains

### APPLICATIONS

Agricultural equipment, handling equipment, general mechanical devices, low-power electric motors, etc.

Heavy industry: metallurgy, construction, transport, conveyors, lifting devices, water pumps, etc.

Quarries, cement works, public works and humid environments: paper works, boring, crushers, vibrating scalpers, etc.

Textile machines, paper transformation machines, hot fans, dryers, water pumps, etc.

Bottling machines, dairy equipment, industrial baking, pasta manufacturing, confectionery, slaughterhouses, etc.

Straight, bevel and worm gearing, main bearings, pivots, articulations as well as for the lubrication of lifting, drive and transmission chains even at low temperatures

Textile and plastic materials transformation machines: for all types of chains, oil-lubricated reams

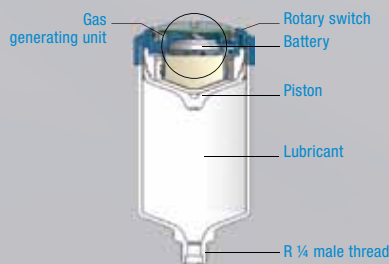
### TECHNICAL DATA

Soap	Lithium Calcium	Lithium	Lithium Calcium	Polyurea	Aluminium complex Paraffinic mineral	•	•
Oil	Mineral	Mineral	Semi-synthetic	Semi-synthetic		Ester + Pao	Ester + PAO
Operating temperature	-30°C/+130°C	-30°C/+150°C	-20°C/+140°C	-40°C/+160°C	-30°C/+120°C	-30°C/ +120°C	-20°C/+250°C
Viscosity at 40°C	220 cSt	150 cSt	360 cSt	160 cSt	195 cSt	220 cSt	320 cSt

### TECHNICAL INFORMATION



Rotary switch for discharge period setting



Oil-filled units with integrated oil retaining valve (red plug)

# Condition Monitoring – FAG SmartQB

**FAG**

Equipment monitoring with plain text display



**FAG SmartQB is a new type of plug-and-play multichannel complete solution for the condition monitoring of equipment:**

- Clearly understood plain text messages in the touch panel on the possible defect cause when changes occur in the condition of the equipment
- 24/7 monitoring for maximum plant availability
- Preconfigured for capture of anomalies in motors, pumps, fans etc.
- Output of up to five defect causes on the display: bearing damage, unbalance, friction/cavitation, temperature increases and basic variations
- Complete commissioning in only 5 minutes

## Applications

Typical areas of application for FAG SmartQB are motors, pumps and fans in the industry sectors:

- Cement
- Paper
- Steel
- Water management
- Machinery and plant engineering



## Technical details

- For machinery with fixed and variable speeds from 100 to 15 000 rpm
- Preconfigured for up to six sensors
- Touch panel with plain text messages in more than 15 languages
- Minimal installation work, using just one cable
- Live display of current values



- Trend pattern / damage development
- RJ45 Ethernet interface for service technicians
- Contact address for expert support
- Static information on
  - operating hours
  - defect frequency (yesterday/today/overall)
  - maximum values
  - mean values since last evaluation

### Scope of delivery of FAG SmartQB base unit:

088632016-0000-10  
Housing for FAG SmartQB with 7 inch touch panel, FAG SmartQB Sensor #1 incl. 10 m Ethernet cable and mains connection plug

### FAG SmartQB sensors each with 10 m cable:

088640370-0000-10 FAG SmartQB Sensor #2  
088640396-0000-10 FAG SmartQB Sensor #3  
088640442-0000-10 FAG SmartQB Sensor #4  
088640469-0000-10 FAG SmartQB Sensor #5  
088640493-0000-10 FAG SmartQB Sensor #6

### Other components:

088640302-0000-10  
FAG SmartQB Lamp (incl. 2 x 10 m cables)

075222922-0000-10  
FAG SmartQB Ethernet cable 10 m

075223252-0000-10  
FAG SmartQB Ethernet cable 20 m

085792446-0000-10  
FAG SmartQB Ethernet cable 30 m

088640272-0000-10  
FAG SmartQB mounting frame for demonstration purposes

# Condition Monitoring



FAG SmartCheck / DTECT X1 s



## FAG SmartCheck

### Online Condition Monitoring Device

An ultra compact, online condition monitoring device that monitors vibration and temperature, as well as other machine and process-specific parameters such as pressure and flow rate. The device can also be used as a machine condition guard with safety switch-off.

Cost effective alternative for online monitoring of small, process critical and non-process critical plant and machinery, including machine tools, spindles, motors, drives, pumps, compressors, HVAC systems and gearboxes.

Uses patented diagnosis technology. Helps companies optimise their manufacturing processes, whilst maximising plant availability and reducing the Life Cycle Cost and Total Cost of Ownership of plant and machinery.

- Easy to operate - requires no special programming skills or knowledge
- Compact and easy to install
- Typically mounted to the machine housing
- Small and lightweight and requires less wiring
- Patented self-learning or 'Teach-In' mode, so, alarm thresholds are adjusted automatically. After set up and commissioning, the device operates autonomously.
- Modular, scalable system that provides multiple expansion options
- IP67 protection rating



## Dtect X1 s

### Online Condition Monitoring System

DTECT X1 s is the upgraded online system for permanent vibration monitoring and diagnosis of plant where downtime can incur high costs. The individual modules – the monitoring unit and the multiplexer – have been integrated in a single compact housing with standardised connectors.

Signals from up to 8 sensors can be recorded and up to 16 monitoring tasks can be stored and executed automatically. The system can be customised to match the specific requirements of the application and process variables such as speed, temperature, torque and pressure can be recorded.

Data can be accessed at the central control station for direct analysis or can be retrieved from any location via telecom links, allowing remote analysis and adjustment of parameters.

- Vibration diagnosis by means of frequency-selective monitoring allows objective assessment of complex plant
- Large number of measurement channels
- Comprehensive software for various data presentation and analysis options
- Increased reliability through a combination of process parameters
- Space saving due to compact construction
- Suitable for harsh conditions (-20 °C to +70 °C)
- Versatile communication interfaces and connection options
- Breakdown protection for increased operational security
- Flexible and simple installation

## FAG SmartLamp

### Alarm indicator for FAG SmartCheck

The perfect accessory for a simple alarm function when, for instance, the unit is enclosed or FAG SmartCheck is not directly visible. Suitable for displaying the status of isolated fans, electric motors, pumps, or compressors.

- Patented LED technology
- Equipped with a standard cable and M12 plug connector
- Machine condition visible from a long distance
- No configuration necessary, simply plug & play
- Simple, low cost installation



## FAG SmartConnectBox

### Power supply distribution for FAG SmartCheck devices

The FAG SmartConnectBox power supply unit enables easy distribution of power supply inputs and outputs to a maximum of four FAG SmartCheck devices.

Rather than running separate cables from four FAG SmartCheck devices to a speed sensor, this new system provides a cleaner, more elegant solution for customers, particularly when monitoring the condition of large rotating machines such as electric motors, geared motors and variable speed drives.





# Maintenance Products

FAG

## Schaeffler Mounting Toolbox

The correct mounting and dismounting of rolling bearings can save time and dramatically increase the life of bearings, as well as maximising the availability of critical plant and machinery by avoiding costly breakdowns. The key is to ensure that the appropriate tools for the mounting and dismounting of rolling bearings are on hand at the installation or assembly stage. Appropriate tools may include thermal mounting and dismounting tools such as induction heating devices and heating plates, mounting paste and heating rings, as well as feeler gauges, hydraulic extractors, hydraulic nuts and hand pump sets. Using the correct tools ensures that bearings are mounted and removed easily and quickly without causing damage to the bearings or surrounding equipment.

The Schaeffler Mounting Toolbox is a web-based information guide on how to professionally install rolling bearings. As well as learning about which tools and fitting aids are required to install rolling bearings, users can also view short videos that demonstrate how these tools should be used.

Website users are presented with a 'Virtual Plant' home screen, which serves as the main user interface, allowing fast navigation around the website. The objective is to make users feel that they are actually in a factory, looking over the shoulder of a professionally-qualified mounting service technician, who is demonstrating how to correctly mount the bearings.

The website provides details of mounting tools and accessories, and demonstrates the benefits of correctly mounted rolling bearings, which include longer operating life for the bearing, reduced unplanned downtime, and higher machine availability.

Moreover, correct alignment and lubrication can achieve improved energy efficiency of machines and equipment.

The Virtual Plant comprises three pillars that represent the main topics of the Mounting Toolbox: 'Mounting/ Dismounting', 'Alignment', and 'Lubrication'.

[mounting-toolbox.schaeffler.com](http://mounting-toolbox.schaeffler.com)



## Mounting

### Mounting tool set



Designed to enable economical and secure mounting of rolling bearings up to 50mm bore and can also be used to easily mount sleeves, intermediate rings, seals and similar parts.

### Mechanical extractors



Designed to dismount small rolling bearings up to approx. 100mm bore diameter that are located with a tight fit on a shaft or in a housing.

### Hook wrenches



For tightening and loosening of locknuts on shafts, adapter and withdrawal sleeves, mounting of small bearings on tapered shaft seats, adapter or withdrawal sleeves, dismounting of withdrawal sleeves and nuts.

### Spider hydraulic extractors



Designed for use where higher extraction forces are required, these devices allow rolling bearings, gears, sleeves and many other shrink-fitted parts to be dismounted.



### Puller TRISECTION



Three section plates allow the extraction of complete bearings, tightly fitted inner rings and other components.

## Maintenance Products

**FAG**

### Thermal Mounting/Dismounting products

#### Hydraulic nuts



Hydraulic nuts can be used to press parts with a tapered bore onto their tapered seat.

#### Induction heating devices



The range includes three table units suitable for mobile and fixed use and three heavy duty, standalone devices capable of handling work pieces up to 1600 kg.

#### Hand pump sets



The range includes one hand pump set with a single stage pump (1000 bar) and three hand pump sets with twin stage pumps (1000 bar, 1600 bar and 2500 bar).

#### Medium frequency heating



Alternative induction heating method for mounting and dismantling large-sized bearings and housings.

#### Maintenance product hire

You can also hire all mechanical maintenance products including hydraulic nuts or measuring and maintenance devices etc.

Our highly skilled engineers are available to assist with any enquires, including on-site visits as well.

### Lubricants

#### Arcanol lubricants



Schaeffler Group has worked with leading lubricant manufacturers to develop the Arcanol range of lubricating greases that are particularly suitable for rolling bearings.

#### FAG CONCEPT8



Multi-point lubricator for up to eight different bearing positions

#### FAG CONCEPT2



Compact lubricator with one or two individually controllable pump bodies for up to two lubrication points.

### Alignment products

#### Top-Laser TRUMMY2



An optical-electrical instrument for measuring and setting optimum belt tension.

#### Top-Laser Equilign



Simple and precise laser optical alignment of shafts

#### Top-Laser SMARTY2



An economical measuring device for the alignment of belt pulley and chain sprockets.

# Selecting the right grease for rolling bearings

FAG

Often overlooked by design and maintenance engineers, selecting the most suitable grease for a rolling bearing can prevent premature bearing failure, while also ensuring high reliability and optimum operating life.

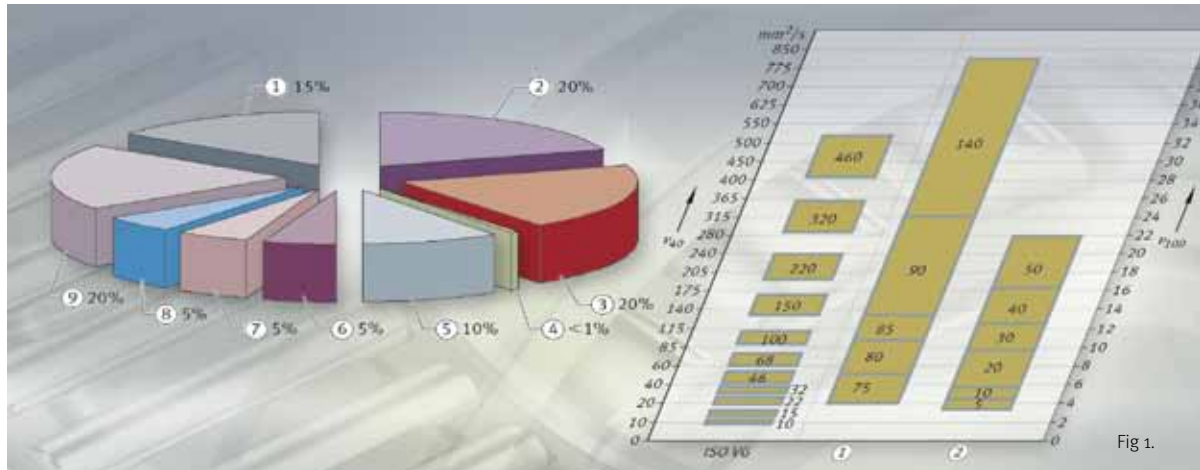


Fig 1.

Selecting the correct lubricant is a critical factor in ensuring the reliability and optimum operating life of a rolling bearing. Failure statistics (see Fig 1) show that a significant proportion of premature rolling bearing failures are directly or indirectly related to the lubricant used. The main causes of failure here are unsuitable lubricants (20%), aged lubricants (20%) and insufficient lubrication (15%).

Although lubricating oils (e.g. mineral oils and synthetic oils) are sometimes recommended for use with rolling bearings in extreme operating conditions (e.g. high temperatures or radiation), most bearing manufacturers recommend the use of greases. This article will therefore focus on selecting suitable greases for rolling bearings.

## Grease Selection

When selecting a suitable grease for a rolling bearing, a number of application-related factors need to be considered. These include the type of bearing, operating speed, temperature and load. Other factors such as mounting position, sealing, shock and vibration, and legal/environmental regulations may also need to be considered.

## Grease Characteristics and Classification

The characteristics of a grease fundamentally depend on the following three properties:

### Base oil type & viscosity

The viscosity of the base oil is responsible for the formation of the lubricant film. As a base oil, mineral oils or synthetic oils are commonly used. It is important that synthetic oils are differentiated according to their type as these possess very different characteristics.

### Thickeners

Typical thickeners used include metal soaps or metal complex soaps. Organic or polymer thickeners such as polycarbamide are becoming increasingly important.

### Additives

All greases contain additives. A distinction is made between additives that have an effect on the oil itself (oxidation inhibitors, viscosity index improvers, detergents, etc.) and additives that have an effect on the bearing or the metal

surface (e.g. anti-wear additives, corrosion inhibitors, friction value modifiers).

Greases are classified in terms of their principal components: thickener and base oil. Greases are produced in various consistencies, which are defined as NLGI grades. These are determined by the 'worked penetration' of the grease according to ISO 2137. The higher the NLGI grade, the harder the grease. Preferred greases for rolling bearings are those with NLGI grades of 1, 2 or 3.

## Factors influencing grease selection

### Bearing type

A distinction needs to be made between point contact (ball bearings) and line contact (needle roller bearings and cylindrical roller bearings).

In ball bearings, each overrolling motion at the rolling contact places strain on only a relatively small volume of grease. In addition, the rolling kinematics of ball bearings exhibit only relatively small proportions of sliding motion. The specific mechanical strain placed on greases in bearings with point contact is therefore significantly less than in bearings with line contact. Typically, greases with a base oil viscosity ISO VG 68 to 100 are used.

In rolling bearings with line contact, higher requirements are placed on the grease. Not only is a larger grease quantity at the contact subjected to strain, but sliding and rib friction is also to be expected. This prevents the formation of a lubricant film and would therefore lead to wear. As a countermeasure, greases should be selected that exhibit a higher base oil viscosity (ISO VG 150 to 460 or higher). Anti-wear additives may also be required and consistency is normally NLGI 2.

### Speed

The speed parameter of the bearing should always be a good match for the speed parameter of the grease. This depends on the type and proportion of the thickener, the base oil type and the proportion of base oil.

The speed parameter of a grease is not a material parameter but depends on the bearing type and the required minimum running time.

As a general guide, for rolling bearings rotating at high speeds or with a low requisite starting torque, greases with a high speed parameter should be selected. For rolling bearings rotating at low speeds, grease with a low speed parameter is recommended.

### Temperature

The temperature range of the grease must correspond to the range of possible operating temperatures in the rolling bearing. The operating temperature range is dependent on the type and proportion of thickener, the type and proportion of base oil, the production quality and production process. The stability of the grease at high temperature also depends primarily on production quality and production process.

In order to achieve reliable lubrication and an acceptable grease operating life, it is generally recommended that greases should be selected according to the bearing temperature that normally occurs in the standard operating range.

Other factors to consider include the upper operating temperature of the grease, the dropping point and the lower operating temperature.

### Load

For a load ratio  $C/P < 10$  or  $P/C > 0.1$ , greases are recommended that have higher base oil viscosity and anti-wear additives. These additives form a reaction layer on the metal surface that provides protection against wear. These greases are also recommended for bearings with an increased proportion of sliding motion (including slow running) or line contact, as well as under combined radial and axial loads.

### Water & Moisture

If the application is in a damp environment, moisture can enter the bearing. Water may condense within the bearing if there are rapid temperature fluctuations between warm and cold. This is a particular problem if large cavities exist in the bearing or housing.

Water can cause severe damage to the grease or bearing and is often due to ageing or hydrolysis, interruption of the lubricant film and corrosion.

## Selecting the right grease for rolling bearings

**FAG**



Barium and calcium complex soap greases have proved favourable in these conditions as they provide good water resistance and act to repel water. The anti-corrosion effect of a grease is also influenced by additives.

### Oscillations, shocks and vibrations

Oscillation loads can have a considerable effect on the structure of thickeners in greases. If mechanical stability is not sufficient, changes in consistency may occur. This leads to softening, de-oiling on an isolated basis, but also hardening of the grease with a corresponding reduction in lubrication capability. It is therefore recommended that a grease should be selected whose mechanical stability has been tested accordingly.

Options here include the expanded worked penetration, the Shell Roller Test in accordance with ASTM D 1831 and a test run on the FAG AN42 test rig.

### Seals

If hard contaminant particles penetrate the bearing, this will not only lead to increased noise but also to wear. Appropriate sealing of the bearing should prevent this. The grease can assist this sealing effect by forming a stable collar on the seal. In this case, more solid type greases are more suitable, as greases that are too soft tend to favour the escape of grease.

Mounting position & adjacent components  
Even where an axis of rotation is vertical or inclined, lubricant must remain at the lubrication point. In addition to appropriate seals, flowing away of the grease can be prevented by using a more viscous grease. If several lubrication points are located close together, unintentional contact can occur.

Attention must therefore be paid to compatibility of the lubricants with each other. However, where possible, the optimum solution is to use only one grease, which should also be compatible with the cage and seal material.

### Legal & Environmental

Depending on the application and the industry sector, legal and environmental factors must be considered when selecting a suitable grease. In the food processing industry, for example, the use of greases with appropriate authorisation is specified. A worldwide standard that can be used is approval in accordance with the NSF (National Sanitary Foundation) H1 or H2, listed in the so-called White Book™.

A lubricant with the code H1 (food-grade lubricant) may be used where occasional, technically unavoidable contact with foodstuffs cannot be eliminated. This means that the grease must be non-toxic, rapidly broken down by the organism and neutral in terms of both odour and taste. Such lubricants often comprise aluminium complex soap thickeners and polyalphaolefins or medicinal white oils as a base oil.

H2 lubricants are intended for general use within the food processing industry where no contact with foodstuffs occurs. Greases with biological degradability must be provided where the lubricant can pass directly into the environment.

### Overview of Arcanol Rolling Bearing Greases

	Arcanol MULTITOP	MULTI2	MULTI3	LOAD150	LOAD220	LOAD400	LOAD1000	TEMP90	TEMP110	TEMP120	TEMP200	SPEED2,6	VIB3	FOOD2
Characteristic	Universal grease for ball and roller bearings	Universal grease for ball bearings OD † 62mm	Universal grease for ball bearings OD > 62mm	Special grease for ball, roller and needle roller bearings, linear guidance systems	Special grease for ball and roller bearings	Special grease for ball and roller bearings	Special grease for ball and roller bearings	Special grease for ball and roller bearings	Special grease for ball and roller bearings	Special grease for ball and roller bearings	Special grease for ball and roller bearings	Special grease for ball bearings	Special grease for ball and roller bearings	Special grease for ball and roller bearings
Areas of application	in rolling mills, construction machinery, automotive engineering, spinning and grinding spindles	in small electric motors, agricultural and construction machinery, household appliances	in large electric motors, agricultural and construction machinery, fans	in machine tools	in rolling mill plant, rail vehicles	in mining machinery, construction machinery, wind turbines	in mining machinery, construction machinery, preferably under shock loads and large bearings	in couplings, electric motors, automotive engineering	in electrical equipment, automotive engineering	in continuous casting plant	in track rollers in baking machinery, piston pins in compressors, kiln trucks, chemical plant	in machine tools, instruments	in blade adjusters in rotors for wind turbines, packaging machinery, rail vehicles	in applications with food contact, H1 to USDA
Performance	at increased speeds, high loads, low and high temperatures			at high loads, with wide speed range movements	at high loads, with wide speed range, high humidity	at very high loads, moderate temperatures, moderate speeds	at very high loads, moderate temperatures, low speeds	at high temperatures, high loads	at high temperatures, high speeds	at high temperatures, high loads	at very high temperatures, in chemically aggressive environments	at very high speeds, low temperatures	at high temperatures, high loads, with oscillating motion	





**EXCELLENCE IN LUBRICANTS**

*IT'S NOT JUST OUR STRAPLINE – IT'S OUR PHILOSOPHY...*

We're the largest independent lubricants company in the UK, manufacturing and supplying a range of lubricants and associated products to automotive, commercial, agricultural, industrial, off highway & rail sectors.

Our commitment to total quality management covers everything from design to production, distribution and customer support. Throughout the company's history, our product development has been at the forefront of lubricant technology.

## INDUSTRIAL

Exol's extensive industrial product range has been designed to cover all the needs of machine shops and industrial plant. The range includes both neat and water miscible metal cutting and forming fluids through to machine tool lubricants and rust preventatives



Hydraulic Oils



Gear Oils



Machine & Slideway  
Oils



Compressor  
Oils



Multi-Functional  
Oils



Turbine  
Oils



Soluble Cutting &  
Grinding Oils



Neat Cutting &  
Grinding Oils



Forming Oils



Greases



Ancillary Products

## AGRICULTURAL

The highly developed agricultural machinery in use in today's intensive farming environment needs the specialised protection afforded by Exol's range of agricultural lubricants. Exol's agricultural product range has been developed to satisfy the requirements of the latest specialised tractors through to older types of farming machinery and ancillary equipment



Universal Oils



Engine Oils



Gear &  
Transmission Oils



Hydraulic  
Oils



Greases



Ancillary  
Products

## RAIL

Exol has a range of specialised products for use in the rail industry including heavy duty diesel engine oils, power transmission fluids and high quality greases. Exol's rail products are renowned for their long predictable service life and trouble-free operation.



Engine Oils      Gear & Transmission Oils      General Lubricating Oils      Hydraulic Oils      Greases      Ancillary Products

## COMMERCIAL

Exol's commercial vehicle lubricants satisfy the needs of the most modern trucks and buses as well as older models. The exhaustive range features low SAPS, fully synthetic engine oils, long drain semi synthetics and traditional mineral oil grades as well as sophisticated automatic transmission fluids, manual gear oils and ancillary products.



Low SAPS Engine Oils      Fully & Semi Synthetic Engine Oils      Mineral Oil Based Engine Oils      Gear & Transmission Oils      Hydraulic Oils      Greases      Ancillary Products

## OFF HIGHWAY

Exol's off-highway range of lubricants and fluids encompasses a wide variety of sectors including construction, marine and forestry. The range includes specialised transmission fluids, marine specific engine oils, biodegradable lubricants and sophisticated greases.



Engine Oils      Universal Oils      Gear & Transmission Oils      Marine Engine Oils      Gas Engine Oils      Hydraulic Oils      Greases

## AUTOMOTIVE

Exol's comprehensive range of automotive lubricants combine a high level of protection to engines and transmissions with long, trouble free service life. The range includes premium grade low SAPS engines oils, robust semi synthetic and mineral oil based grades and manual and automatic transmission fluids.



Low SAPS Fully Synthetic Engine Oils      Fully Synthetic Engine Oils      Semi Synthetic Engine Oils      Mineral Oil Based Engine Oils      Two Stroke Oils      Gear & Transmission Oils      Greases

Please contact your IADA Distributor for details of pack sizes and product range

### OILS AVAILABLE IN:



### GREASES AVAILABLE IN:





# BONDLOC<sup>™</sup>

## FORMULAS THAT WORK

### ADHESIVES & SEALANTS

Bondloc have been manufacturing adhesives in the UK for over 20 years and have built a worldwide reputation for manufacturing very competitively priced, high performance adhesives for a wide range of industries.

With over 2000 adhesive product formulations all available to the IADA group of distributors we have a solution for most bonding applications. Bondloc's highly experienced technical team are available to give you free advice on any bonding requirements that you may have.

### FROM INNOVATION...



### ...TO APPLICATION

LUBRICATION & MAINTENANCE

#### Anaerobics

A full range of high spec products, including threadlockers, pipeseals, gasketing and retaining compounds. Anaerobic adhesives cure in the absence of air and in the presence of metals and they exhibit excellent chemical and environmental resistances.

#### UV Cure

We manufacture a wide range of UV cure and visible light-curing adhesives. We can also supply equipment and accessories to meet the needs of all types of bonding, encapsulating, coating, tacking and sealing applications.

#### Cyanoacrylates

Universally known as superglues, our cyanoacrylate adhesives are triple distilled to ensure they are suitable for the most stringent of applications. They are available in a range of viscosities and are suited for use on a wide variety of substrates.

#### Maintenance Range (MRO)

A wide array of aerosols and pastes for the most demanding of MRO applications. The range also includes pre-treatment cleaners and adhesive activators.

#### Structural Adhesives

Bondloc structural adhesives utilise a wide range of resin bases in order to provide end users with the best possible product for each individual application. Our innovative range includes 10:1 and 1:1 ratio and are designed to provide high strength joints and greater flexibility in component design.

#### Sealants

Our versatile and durable adhesives and sealants include high-performance RTV silicones, polyurethanes and MS polymers. They offer exceptional performance in sealing and bonding applications.

Save up to 50% when compared to the other leading brands



### B222 Screwlock

For small fasteners, where vibration loosening prevention and non-leakage through threaded fastening is required.



- Colour: Purple
- Viscosity: 1,200cps
- Breakaway Strength: 6Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.5mm
- Cure Time (without activator): 15 mins
- Loctite Ref: 222

### B243 Oil Tolerant Threadlock

Oil tolerant and designed for direct application onto "as received parts" where oily film exists or where contamination is a problem.



- Colour: Blue
- Viscosity: 1,200-1,800cps
- Breakaway Strength: 19Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.1mm
- Cure Time (without activator): 15 mins
- Loctite Ref: 243

### B270 Studlock

Locks studs up to M25, sealing against leakage and corrosion.



- Colour: Green
- Viscosity: 500cps
- Breakaway Strength: 40Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.25mm
- Cure Time (without activator): 2 hrs
- Loctite Ref: 270

### B515 Flexible Gasket

Typically used as a form-in-place gasket for pumps and compressors.



- Colour: Purple
- Viscosity: Paste
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.5mm
- Cure Time (without activator): 12 hrs
- Loctite Ref: 515

### B518 Flexible Gasket

Seals close fitting joints between rigid metal faces and flanges.



- Colour: Red
- Viscosity: 3,500cps
- Shear Strength 12.5N/mm<sup>2</sup>
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.5mm
- Cure Time (without activator): 12 hrs
- Loctite Ref: 518

### B542 Hydraulic Thread Sealant

Used for hydraulic valves, threaded couplings, adaptors, quick disconnect parts, compression fittings and vibration proofing joints.



- Colour: Brown
- Viscosity: 400-800cps
- Breakaway Strength: 15Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.05mm - 0.25mm
- Cure Time (without activator): 10-20 mins
- Loctite Ref: 542

### B574 Instant Gasket

Instant in-place gasket former making almost any size and shape, replacing paper, cork, etc. Ideal for gearbox sealing, pump flanges, transmission assemblies, cover plates on tanks, cam shaft sealing and bearing gaps.



- Colour: Orange
- Viscosity: 50,000cps
- Breakaway Strength: 8Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.5mm
- Cure Time (without activator): 15-30 mins
- Loctite Ref: 574

### B577 Pipesel

Seals all types of threaded connections. Good chemical/solvent resistance to ethanol, motor oil, unleaded petrol, acetone and brake fluid.



- Colour: Yellow
- Viscosity: 50,000cps
- Breakaway Strength: 11Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.5mm
- Cure Time (without activator): <15 mins
- Loctite Ref: 577

### B603 Oil Tolerant Retainer

Designed for direct use on "as received parts" such as those with protective films or where surrounding parts contamination is a problem in maintenance.



- Colour: Green
- Viscosity: 125cps
- Breakaway Strength: 28Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.15mm
- Cure Time (without activator): <15 mins
- Loctite Ref: 603

### B638 High Strength Retainer

For under load structural components such as cylindrical parts, keys, splines, even structural tubing with close tolerance fit.



- Colour: Green
- Viscosity: 2500cps
- Shear Strength (Steel): 30Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.2mm
- Cure Time (without activator): 5 mins
- Loctite Ref: 638

### B641 Bearing Retainer

Secures all types and sizes of bearings, shafts and cylindrical parts which will require disassembly in the future.



- Colour: Yellow
- Viscosity: 400-800cps
- Shear Strength (Steel): 12Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.2mm
- Cure Time (without activator): 10-15 mins
- Loctite Ref: 641

### B648 High Temperature Retainer

Secures all types of cylindrical parts as per B641 but with continuous working temperature up to 180°C.



- Colour: Green
- Viscosity: 500cps
- Shear Strength (Steel): 25Nm
- Min / Max Temperature: -55°C - +180°C
- Gap Fill: 0.15mm
- Cure Time (without activator): 5-15 mins
- Loctite Ref: 648

Our products are used for thousands of different applications across the industrial market; including automotive, aerospace, marine, transport, general and precision engineering.





**BONDLOC®**  
FORMULAS THAT WORK



## B401 Superglue Adhesive

Rapid bonding for a range of materials including metals, plastics, elastomers, wood, paper, leather and fabric.

- Colour: Clear
- Base: Ethyl
- Viscosity: 90-120cps
- Shear Strength: 25N/mm<sup>2</sup>
- Fixture time (EPDM): <5 seconds
- Loctite Ref: 401



## B406 Superglue Adhesive

Designed for bonding plastics and elastomeric materials where a rapid fixture is required.

- Colour: Clear
- Base: Ethyl
- Viscosity: 25-35cps
- Shear Strength: 15-25 N/mm<sup>2</sup>
- Fixture time (EPDM): <5 seconds
- Loctite Ref: 406



## B415 Superglue Adhesive

Designed for metal bonding, high viscosity. Can also be used for general purpose.

- Colour: Clear
- Base: Methyl
- Viscosity: 1,200-1,800cps
- Gap Fill: 0.2mm
- Shear Strength: 15-25 N/mm<sup>2</sup>
- Fixture time (EPDM): <5 seconds
- Loctite Ref: 415



## B454 Superglue Adhesive

No Drip. Designed for difficult to bond materials which require uniform stress distribution and strong tension/shear strength. Ideal for vertical or overhead applications.

- Colour: Clear
- Base: Ethyl
- Viscosity: Gel
- Shear Strength: 15-25N/mm<sup>2</sup>
- Fixture Time (EPDM): <5 seconds
- Loctite Ref: 454



## B480 Superglue Adhesive

Rubber toughened adhesive with increased flexibility and peel strength along with enhanced resistance to shock.

- Colour: Black
- Base: Ethyl
- Viscosity: 350-450cps
- Shear Strength: 15-25N/mm<sup>2</sup>
- Fixture Time (EPDM): <15 seconds
- Loctite Ref: 480



## B7649 Anaerobic Activator

Speeds cure of all anaerobic fluids and pastes and extends cure through volume. B7649 helps fixture time and reduces ultimate cure time. Use B7649 when materials are inactive (plastic or passivated metals) or where temperature is under 15°C

- Colour: Yellow/Amber
- Base: Heptane
- Evaporation: 60 seconds



## B2001 Steel Epoxy Stick

A steel-filled epoxy putty for general maintenance and repairs. For filling, rebuilding and bonding metal surfaces.

- Colour: Grey (mixed)
- Viscosity: Putty
- Tensile Strength: 5N/mm<sup>2</sup>
- Min / Max Temperature: +121°C
- Cure Time: 24 hrs
- Loctite Ref: 3463



## B2002 Aluminium Epoxy Stick

Epoxy putty for general maintenance and repairs. For permanent repairs to aluminium surfaces.

- Colour: Light Silver (mixed)
- Viscosity: Putty
- Lap Shear Strength (steel): 4.8N/mm<sup>2</sup>
- Min / Max Temperature: +121°C
- Cure Time: 24 hrs



## B2003 Plastic Epoxy Stick

Fast, permanent repairs to most plastics. Allows patching in areas where welding is not possible. Ideal for emergencies.

- Colour: Light Blue (mixed)
- Viscosity: Putty
- Lap Shear Strength (steel): 4.8N/mm<sup>2</sup>
- Min / Max Temperature: +121°C
- Cure Time: 24 hrs



## B2012 Rapid Five Minute Cure

Epoxy Resin Suitable for bonding a wide variety of surfaces including steel, aluminium, and galvanised iron. Product reacts within a few minutes to give a tough resilient bond.

- Colour: Clear
- Viscosity: Part A: 100cps, Part B: 130cps
- Shear Strength (Steel): 3.8N/mm<sup>2</sup>
- Min / Max Temperature: -40°C - +121°C
- Cure Time (without activator): 5 mins
- Loctite Ref: 3430



## B3298 Universal Bonder

Toughened 1:1 ratio structural adhesive formulated for bonding thermoplastics, metals and composites. Minimal surface preparation and rapid fixture time makes it ideal for many assembly applications.

- Colour: Off white / Black (mixed)
- Viscosity: 55,000 - 100,000 cps
- Tensile Strength (GBS): 3,500 - 4,500 psi
- Min / Max Temperature: -40°C - +150°C
- Working time: 4 - 6 minutes
- Fixture Time: 10 - 12 minutes
- Full Cure: 4 hrs



## Merchandisers and Stands

Point of sale displays that have been developing and increasing sales for our distributors for many years. Bondloc's 16 product merchandising stand is our most popular starting package for our distribution partners. Whereas Bondloc's 8 product merchandising stand is ideal for the smaller trade counter or retail outlet where space is a premium. There is a 24 product merchandiser available for distributors who have a more extensive range to display. Please contact use for further details.

If the product you require isn't shown here please contact your local IADA distributor who will be able to provide you with any product you require from the Bondloc range.



**BONDLOC**  
FORMULAS THAT WORK

## NEW FOR 2017 - STRUCTURAL ADHESIVES

Bondloc have extended their range of Structural adhesives that utilise a wide range of resin bases in order to provide end users with the best possible product for each individual application. A key factor of our modern design and engineering processes is the desire to produce unique products that will distinguish you from your competitors.

Our innovative range of high strength structural adhesives are fully compatible with modern manufacturing processes and are capable of providing even greater flexibility in component design.



Please contact our Technical desk for further information and to discuss your application requirements

LUBRICATION & MAINTENANCE

### Engineer's Kit

Packed with 15 different products which have been carefully selected for even the most demanding engineer. Comes in a tough, reinforced plastic case with foam interior.



B222 Screwlock 50ml  
B242 Nutlock 50ml  
B270 Studlock 50ml  
B401 Cyanoacrylate 20g  
B406 Cyanoacrylate 20g  
B454 Cyanoacrylate Gel 20g  
B574 Instant Gasket 50ml  
B577 Pipesal 50ml  
B603 Retainer 50ml  
B641 Bearing Fit 50ml  
B660 Metal Fill Retainer 50ml  
B2001 Steel Epoxy Stick 114g  
B2003 Plastic Epoxy Stick 114g  
B2012 Epoxy Resin 28ml  
B5299 High Temp Silicone 220ml

### Minimate Kit

Selection of 12 products in a compact case. The smaller pack sizes and low cost make the Minimate ideal for emergencies.



B242 Nutlock 10ml  
B270 Studlock 10ml  
B401 Cyanoacrylate 20g  
B542 Hydraulic Seal 10ml  
B567 Stainless Pipe Seal 50ml  
B574 Instant Gasket 50ml  
B577 Pipesal 50ml  
B603 Retainer 10ml  
B641 Bearing Fit 10ml  
B2001 Steel Epoxy Stick 50ml  
B3294 Plastic Weld 28g  
RTV123 Silicone 80ml

