

Special lubricants in spray cans





# Special lubricants for machines, tools, automotive and marine applications

#### BECHEM - Lubrication solutions for industry

As the oldest German manufacturer of industrial lubricants, BECHEM today is one of the leading producers of high-quality special lubricants and metal working fluids.

BECHEM products convince by innovative formulations in the most diverse of industrial applications – in machining and forming metal working processes, in coating technology and as for-life lubricants in various technical components.

A strong network of distributors and several national and international production sites ensure that BECHEM products are readily available worldwide.

Tomorrow's technologies. Today.

#### **PICTOGRAMS**

#### **APPLICATIONS**

Food grade/Pharmaceutical technology



Medical technology



Automotive industry



Shipping



Construction machines



Farm machines



Open gears



Heavy industry (mining)



Chains



Wire ropes



Plain bearings



Electrical contacts



Thread lubrication



Cleaning agent



Rust solvent



Corrosion protection



### Lubricating greases

For demanding application fields in automotive engineering, the food industry and mechanical and plant engineering, or for the harsh conditions in the heavy industry, BECHEM offers the industrial user a high quality assortment of lubricating greases for a wide variety of tribological issues. These range from high-performance, high and low temperature lubricating greases to heavy-duty greases and extend to lifetime lubricants for automotive applications.

Developed in accordance with the latest findings in the field of tribology, BECHEM lubricating greases offer convincing advantages relative to friction, wear and lubrication, as well as economical and ecological optimization of processes.







#### Berulub FR 43 Spray

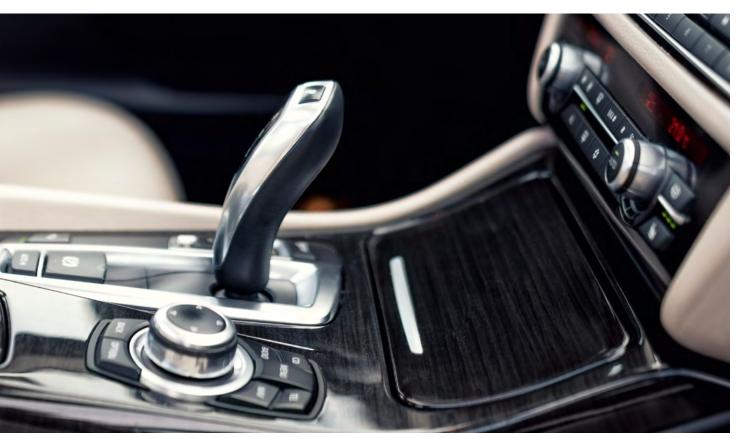
Sliding and damping lubricant for automotive interior applications, minimizes friction and wear, excellent low-temperature behaviour, resistant to water and oxidation, prevents stick-slip, noise damping, contains PTFE





#### Berulub FG-H 2 EP Spray

Universal synthetic high-performance lubricant, high load-carrying capacity, excellent protection against corrosion, good adhesion and sealing effect, resistant to cold and hot water, resistant to ageing, ideal e.g. for grease lubricated machine elements in the food processing industry, H1-registered, halal and kosher certified, certified according to ISO 21469



BECHEM lubricants make an important contribution to functionality and haptics of interior components. Specially designed sprays reduce interfering noise and thus ensure a significant improvement in driving comfort.



#### **BECHEM High-Lub SW 2 Spray**

Protection against corrosion and wear, leaves a thin lubricating film after evaporation of the solvent, excellent corrosion protection even under open-air conditions and sea water atmosphere, excellent adhesion, contains EP-additives, e.g. for cam discs, threaded spindles, wire ropes



#### Berulit GA 2500 Spray

Universal lubricant for extreme frictional stress, excellent adhesion, suitable for high temperatures and high pressures, reduces wear and noise generation of machine parts, e.g. for wire ropes, gear rims, open gears

### Lubricating oils

Whether technical food grade lubricating oils, rust removers or noise damping media – BECHEM offers a high-performance lubricating oil product line in spray cans for a wide range of industrial applications. The products, equipped with modern spray heads, enable particularly easy and safe handling.

The products developed by BECHEM for demanding applications comply with the standards and meet the requirements that are imposed on modern lubricants. BECHEM also offers convincing advantages in highly specialized automotive applications with a spray can product line that faultlessly minimizes friction, wear, and interfering noise.



#### Berulub W+B Spray

Multifunctional spray to lubricate precision mechanisms, e.g. in the food processing and beverage industry, neutral in smell and taste, high creeping capacity, water repellent, protection against corrosion, dirt and rust solvent, H1-registered, halal certified



#### **BECHEM Fluid W 68-3H Spray**

Release and lubricating agent for direct food contact, neutral in smell and taste, good corrosion protection, free from animal, genetically modified ingredients and nut oils, 3H-registered



#### **Berulub ND-Spray**

Synthetic noise damping spray to eliminate creaking and squeaking noises inside vehicles, transparent, well suitable for application in the visible area, good plastic and elastomer compatibility



BECHEM lubricants for the food and pharmaceutical sectors meet the strict specifications of the internationally active organization for product tests and product certifications, NSF International. In addition, several products are Halal and Kosher certified.



#### Berulub GD 30 Spray

Multifunctional spray, suitable as rust solvent, creeping oil, lubricant, corrosion protection and cleaner in one product, penetrates and dissolves rust, eliminates humidity, dissolves oil incrustation



Berulub ECO GD 40 Spray

Environmentally-friendly multifunctional spray, suitable as rust solvent, creeping oil, lubricant, corrosion protection and cleaner in one product, readily biodegradable (OECD 301 C), acid and resin free, eliminates humidity, dissolves oil incrustation



Berulub GD 50 H1 Spray

Multifunctional rust solvent developed especially for the food industry, penetrates and dissolves rust, excellent creeping properties, good lubricating and anti-corrosion properties, no resinification, H1-registered, halal certified

### Lubricating oils

Drive chains and conveyor chains are highly stressed components, which are often under permanent load in multi-shift operation. BECHEM high-performance chain oils convince in these demanding processes through high production reliability without extensive maintenance effort. The outstanding protection against corrosion and wear is particularly impressive when mixed friction occurs.

Relative to oil structure and additives, BECHEM chain oils are tailored to the specific application conditions. Due to polar properties they have an extremely high adhesive capacity that when dosed correctly prevents dripping and centrifuging of the oil. In conjunction with the excellent moistening and creeping capacities they are very economical in application.



In addition to use on drive chains and conveyor chains BECHEM high-performance chain oils are also excellently suited for lubrication and as corrosion protection of cams, slide surfaces, and gearing.



#### **Berusynth CP 80 Spray**

Solvent containing chain oil for highspeed, power transmitting drives, excellent adhesion, good creeping capacity, dry running properties based on solid lubricant MoS2, best wash-out stability, good protection against corrosion and wear, noise damping



#### **Berusynth H1 Spray**

Solvent free, synthetic chain and adhesive lubricant for equipment in the food, animal feed and pharmaceutical industry, reliable protection against corrosion and wear, high load-carrying capacity, good penetration properties, H1-registered, halal certified



#### Berusynth 1000 H1 Spray

Synthetic high-performance chain and adhesive lubricant for equipment in the food, animal feed and pharmaceutical industry, high load-carrying capacity, good penetration properties, H1-registered, halal certified



#### Berusynth CB 180 H1 Spray

Synthetic high-performance chain oil, optimised for the use in baking and drying oven, good adhesion, good protection against corrosion and wear, excellent wetting and penetration capability, water resistant, H1-registered, halal and kosher certified, certified according to ISO 21469





#### Berusynth CU 250 Spray

synthetic Universal high-performance chain oil, for high temperatures, good adhesion, very good lubricating properties, good protection against corrosion and wear, excellent wetting and penetration capability, water resistant, H2-registered





#### Berusynth CU 3000 Spray

Synthetic high-performance chain oil, optimised for drives of furnaces, dampers and sterilisers, excellent protection against corrosion and wear, extremely adhesive, no centrifuging, best wash-out stability, good penetration capability, prevents stick-slip

### Lubricating oils

The spray can product range developed by BECHEM ranges from high-quality, mineral-oil based products to extremely high performance synthetic oils, which in addition to extended re-lubrication intervals and reduced downtime, often also contribute towards reducing the diversity of varieties and thus costs.

In addition to application consulting and lubricant management, the technical service can also include regular inspections, sampling and analysis of lubricant samples or execution of running-in processes.



The rope dressing Beruprotect Rope Spray is excellently suited for dusty environments, as it prevents the caking of contamination through formation of a semi-dry, non-stick surface.









#### **Berulit Gear Spray**

Adhesive lubricant and preserving agent for open gears and sliding surfaces, water resistant and water repellent, excellent adhesion even under strong influence of water, good protection against corrosion and wear, high load-carrying capacity





Maintenance and anti-corrosion agent for wire ropes, excellent wetting and creeping properties, longlife corrosion protection, no resinification, excellent adhesion, economical





#### **Beruprotect Spray**

Waxy corrosion protection film for longlife conservation of machines and metal components, excellent protection against corrosion even in case of contact with salt water, excellent adhesion





#### Berusil P 140 Spray

Lubricant, release, assembly and maintenance product for the food and pharmaceutical industry, neutral in smell and taste, colourless, clear liquid, excellent release effect, highly resistant to hot water and water steam, very good dielectric values, H1-registered, halal certified



BECHEM corrosion protection oils are suitable for untreated ferrous metals, as well as for galvanized or phosphated material.

### Cleaners, anti-friction coatings, and pastes

#### Cleaners

In the metalworking industry, cleaning workpieces and semi-finished products is an important work step, since deficient or incorrect cleaning often results in considerable production defects and production faults. With the Beruclean series BECHEM offers high-performance products for residue-free cleaning of any process fluids in the metalworking sector.



#### **Beruclean H1 Spray**

Degreasing and brake cleaning agent, removes all types of oil and grease contaminations as well as not yet hardened paints and coatings, residue-free evaporation, H1-registered

### Anti-friction coatings

Anti-friction coatings are touch dry lubricant solutions which have been developed for specific applications with the aid of latest technologies. With state-of-the-art test devices for every application area, friction and wear or antisqueak properties are determined. This gives the user the security that with the BECHEM anti-friction coatings he is always using products that are optimally tailored to the specific requirement.





#### **Berucoat AF 438 Spray**

Anorganic anti-friction coating for friction partners of metal, air drying, pressure resistant, contains anti-friction lacquer for metal tribological pairings, air-dry, pressure resistant, contains microfine solid lubricants, adheres to smooth surfaces, does not absorb dust or dirt



Berucoat AF 438 Spray is a friction-reducing and extremely resilient anti-friction coating that is used with preference on metallic surfaces.

#### **Pastes**

Since, compared to lubricating greases pastes have a significantly higher portion of solid lubricants and thickeners, they are particularly well-suited for applications where extremely high pressures and extremely high tem-

peratures prevail. Thus as antiseize agent for various assembly applications and as release agents pastes can effectively counteract the danger of fretting corrosion.













#### **Berulub VPN 13 Spray**

Universal high-temperature and antiseize paste with high copper content, prevents seizure, fretting caused by high temperatures, service temperature up to +1150 °C, good protection against corrosion e.g. for screwed and plug connections, valves, slides

#### **Beruglide Spray**

Synthetic anti-squeak paste to eliminate disturbing noices (creaking, squeaking) in automotive interior and exterior applications, excellent release and sliding effect by PTFE, excellent noise damping, good plastic and elastomer compatibility, H1-registered





#### **Berulub Palfluid Spray**

Special paste for the lubrication of highly stressed plastic sliding elements (e.g. telescopic booms of mobile cranes), machinery and industrial kitchen equipment, friction partners non-ferrous metals/non-ferrous metals, metals/elastomers and plastic/plastic, good adhesion, contains PTFE

For service, maintenance, and assembly, BECHEM offers a sophisticated product range of lubrication products. Please contact your BECHEM partner for more information.

### Technical data

SPRAY CAN 400 ML*	Base oil	Thickener	Base oil viscosity [mm²/s] at 40°C	Working temperature range [°C]	
Berulub FR 43 Spray	Polyalphaolefin (PAO)	Special lithium soap	32	-50	+140
Berulub ND Spray (100 ml)	Perfluorpolyether (PFPE)	-	160	-40	+200
Berulub W + B Spray	Med. white oil	-	70	-	
BECHEM High-Lub SW 2 Spray	Mineral oil	Special calcium soap	100	-25	+80
Berulit GA 2500 Spray (500 ml)	Mineral oil / synthetic oil	Aluminum complex soap	2500	-20	+200
Beruclean H1 Spray	-	-	-	-	
Berusynth H1 Spray	Polyalphaolefin (PAO)	-	100	-50	+200
Berusynth CU 250 Spray	Ester	-	250	-	+250
Berusil P 140 Spray	Silicon oil	-	260	-40	+150
Berusynth CP 80 Spray	Mineral oil/ester		-	-15	+150
Beruglide Spray (100 ml)	Perfluorpolyether (PFPE)	Polytetrafluoro- ethylene (PTFE)	160	-40	+190
Berulub VPN 13 Spray	Polyglykol	Bentonite	370	-30	+1150
Berulub GD 30 Spray	Mineral oil		-	-30	+90
Berusynth 1000 H1 Spray	Polyalphaolefin (PAO)	-	1000	-30	+200
Berulub GD 50 H1 Spray	Med. white oil	-	-	-	-
Berucoat AF 438 Spray	-	-	-	-180	+450
<b>Beruprotect</b> Spray	Mineral oil	-	-	-	
Berusynth CU 3000 Spray	Ester	-	3000	-15	+250
Berulub ECO GD 40 Spray	Ester	-	-	-30	+90
<b>Berulit Gear</b> Spray	Mineral oil	-	-	-	
Beruprotect Rope Spray	Mineral oil	-	9	-20	+100
BECHEM Fluid W 68-3H Spray	Med. white oil	-	68	-10	+120
Berulub FG-H 2 EP Spray	Polyalphaolefin (PAO)	Special calcium complex soap	150	-40	+160
Berulub Palfluid Spray	Ester	Polytetrafluoro- ethylene (PTFE)	5000	-20	+150
Berusynth CB 180 H1 Spray	Ester	-	180	-40	+220

All indications and values correspond to latest knowledge and do not represent any product specification.

\* 100 ml: Berulub ND Spray, Beruglide Spray / 500 ml: Berulit GA 2500 Spray

## Awarded – BECHEM lubricants

High quality lubricants are indispensable products which are worth their investment, they are winners of prestigious awards – by making a decisive contribution to performance, energy efficiency and sustainability of products and processes.



Award for Berufluid – a joint project with Fraunhofer Institute IVV and IWF Braunschweig.

BECHEM wins award for tailored solutions in the premium vehicle sector.





BECHEM as an award-winner is one of the 20 most innovative companies in North Rhine-West-phalia.

BECHEM wins the award for innovative lifetime lubrication of different vehicle components.





BECHEM wins the NRW 2015 Efficiency Award for innovative and resource-efficient coating in cold massive forming.

### Lubrication solutions for industry

