



**Special lubricants for deep mining**



# High safety in deep mining

Safety is a major interest, especially in deep mining. Therefore, BECHEM has developed fire resistant hydraulic fluids for mining application. High performance greases and high performance lubricating oils for heavy duty and high temperature applications, fulfil the highest standards of safety and render optimal benefit.

For every gear box BECHEM offers the suitable gear oil and furthermore special lubricants for chain and rope lubrication as well as maintenance auxiliaries for the mining industry. All these special products are convincing by their high quality, their performance and their economic efficiency.

## Fire resistant hydraulic fluids

<b>FIMITOL P 87 AF</b>	Water-miscible hydraulic concentrate type HFA-E (E-emulsion) based on mineral oils for hydraulic face supports, minimizes damages, achieves outstanding lubrication and thus guarantees perfect function of the hydraulic systems
<b>STARLIT EM-BB</b>	Synthetic hydraulic concentrate type HFA-S (S-solution) for water hydraulics and cooling circuits
<b>BECHEM HYDROSTAR HY 46</b>	Fire resistant hydraulic fluid type HFC on water glycol basis
<b>FIMITOL 4816 STEMPEL- KONSERVIERER</b>	Special corrosion protection for long-time conservation of props

All above mentioned hydraulic fluids fulfil the requirements of the 7. Luxembourg Report.



## High performance multipurpose greases

<b>HIGH LUB L2</b>	Standard grease without solids for general application, suitable for a wide range of machinery
<b>HIGH LUB LT 2 EP</b>	Standard grease without solids for high loaded bearings, excellent in central lubrication systems, available in different NLGI grades
<b>HIGH LUB FA 67/II</b>	Special grease for plain and roller bearings at high loads and high speeds
<b>HIGH LUB LFB 2000</b>	Standard grease with light coloured lubricant particles for general application, offers emergency running properties
<b>HIGH LUB SW 2</b>	Special grease for roller bearings, plain bearings and ropes, highest resistance against aggressive water or gas

## Heavy duty/high temperature greases

<b>HIGH LUB FA 50 MO</b>	Special grease with lubricant particles and a very high base oil viscosity for bearings under extreme conditions
<b>HIGH LUB FA 67</b>	Special greases without solids of different base oil viscosities for heavily loaded bearings
<b>BERUPLEX KS 22</b>	Mineral oil based high temperature grease thickened by an extremely stable special calcium complex soap
<b>BERUPLEX CS 2 EP</b>	Mineral oil based high temperature grease for general application under thermal radiation
<b>BERUTOX M 21 KN</b>	Mineral oil with organic polymer thickener for all thermally burdened lubrication points, outstanding consistency-temperature-performance
<b>BERUTOX MB 2-H</b>	Mineral oil with organic polymer thickener for all lubrication points subjected to elevated temperatures and very aggressive ambient conditions

## Chain/rope lubricants

<b>BECHEM SEILSTAR</b>	Light coloured anticorrosive agent for the conservation of all kinds of wire ropes, hardly dust absorbing, water repellent
<b>BERULIT IKP</b>	Graphite containing EP chain oil of ISO VG 100 for dusty environment, successful at conveyor and loading systems



## Gear oils

<b>BECHEM STAROIL G</b>	Standard mineral oil based CLP gear oil, available in ISO VG 68 to 680
<b>BERUGEAR GS BM</b>	Special gear oil with PD additives for heavily loaded or damaged gears, available in ISO VG 100 to 1500
<b>BERUSYNTH EP</b>	Synthetic CLP PG gear oil based on polyglycol, available in ISO VG 68 to 1000
<b>BERUSYNTH GP</b>	Synthetic CLP HC gear oil based on synthetic hydrocarbon, available in ISO VG 68 to 1000



## Especially for deep mining

In mining all heavy duty and high temperature lubricants, hydraulic fluids and multipurpose greases have to withstand enormous mechanical and thermal stresses as well as the rough ambient conditions. For these purposes BECHEM offers special solutions for the lubrication of roller and plain bearings, gear lubrication and operation of hydraulic machinery.

These fulfil all requirements regarding quality, extended lifetime, optimal performance and, of course, economic efficiency in combination with environmental compatibility.

That'Special!



Maintenance auxiliaries	
<b>ECS 89</b>	Water-soluble agent to optimize dust reduction during bulk material handling
<b>BERULIT 75</b>	Pneumatic oil for lubrication of compressed air hammers and akin aggregates
<b>BAKTERIZID PH</b>	Conservation agent to prevent water hydraulic systems from micro-biological attacks
<b>ADDITIV EMULGATOR EGM</b>	Water-miscible additive to emulsify oils during cleaning of hydraulic systems
<b>SYSTEMREINIGER 50</b>	Disinfecting cleaner for complete cleaning of circulating systems
<b>BECHEM GELSEROL SUPER</b>	Multipurpose oil for maintenance, rust removing agent with good corrosion protection, ability to loosen rusty screws and reduce squeaking noise
<b>BECHEM GREEN GD 40</b>	Biodegradable oil for maintenance, rust removing agent with good corrosion protection, ability to loosen rusty screws and reduce squeaking noise



## That'Special!

A tradition we are proud of since 1834. This is still today demonstrated by our trademark: the Rhus Flower. After permanent development BECHEM is today a »Global Player«.

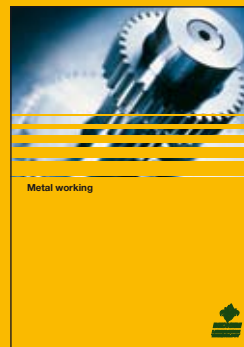
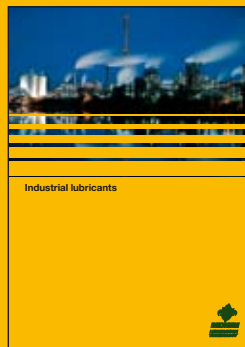
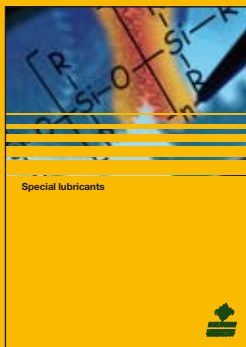
BECHEM special lubricants, industrial lubricants, metal working fluids and solutions for forming technology are based on our extensive experience in the development of special chemistry and latest tribologic knowledge. Our know-how with regard to friction, wear and lubrication always considers our customers' requirements for economic and ecologic optimisation of processes.

We feel obliged to tradition and progress. That'Special!

Besides the headquarter in Hagen, BECHEM has two more production sites in Germany, i.e. in Mieste and Kierspe. In addition to that, our worldwide distribution network allows us to develop markets all over the world. With the daughter companies in France, India, Switzerland and North East China, as well as the Joint Ventures in the USA, South Africa, Sweden, Russia and South China BECHEM shows its international presence.

It is our target to supply our customers with high quality products and to simultaneously meet the valid international standards. The quality of our products is confirmed by the certification according to the automotive standard ISO/TS 16949. The requirement to our standard is guaranteed by the systematically effected internal audits and regular inspections by the RWTÜV at all sites, as well as by audits carried out by our customers.

**Further information material can be ordered directly with us or is available under [www.bechem.com](http://www.bechem.com).**



### Special lubricants

- Low and high temperature lubricants
- Plastic lubrication
- Electrical contact lubricants
- Food grade lubricants
- Valve lubricants
- Anti-Friction-Coatings

### Industrial lubricants

- High performance multipurpose greases
- Heavy duty and high temperature lubricants
- Hydraulic oils
- Gear lubricants
- Green lubricants

### Metal working

- Deep drawing/punching oils
- Coolant lubricants
- Cutting and grinding oils
- Deep drilling oils
- Corrosion protection oils
- Cleaning agents

### Forming technology

- Wire drawing lubricants
- Cold forging oils
- Semi hot/hot forging
- Tube drawing lubricants
- Cold massive forming oils



CARL BECHEM GMBH, Weststraße 120, 58089 Hagen, Germany

Phone +49 2331 935-0, Fax +49 2331 935-1199, E-Mail: [bechem@bechem.de](mailto:bechem@bechem.de), [www.bechem.com](http://www.bechem.com)