



Copper and Wire Drawing Lubricants



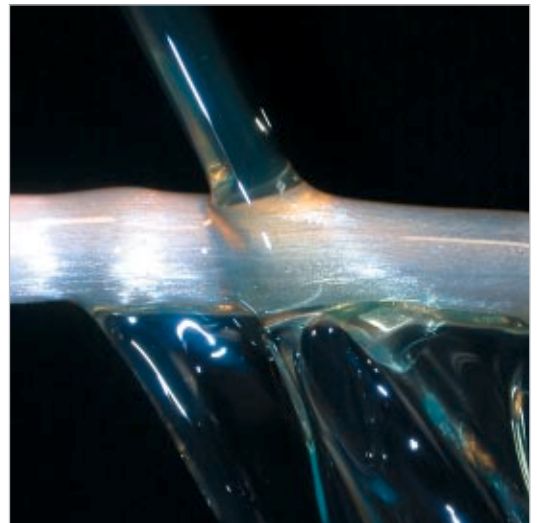
Highest performance with UNOPOL

The UNOPOL series of products are world wide well known and established when copper wires or wires of copper alloys are drawn. Permanent research and development, combined with the well known professional assistance of BECHEM guarantee the very high reputation of the UNOPOL series in the wire drawing industry.



KUBITRAC – a light and clean thing

In aluminium wire drawing the KUBITRAC series of drawing oils are developed and designed to match the latest requirements of the industry. Highest possible lubricity is combined with excellent lifetime.



Quality, which is drawing!

Permanently increasing demands to productivity and quality require the use of **BECHEM** wire drawing lubricants. These are worldwide leading products for drawing wires of copper, aluminium or ferrous metals. Our programme of carriers, oils, emulsions, solutions and additives covers the complete application spectrum of wire drawing.

Copper Wire Drawing

Rod breakdown products

UNOPOL G 600

Mineral oil containing drawing lubricant for drawing of copper wire in rod breakdown systems. Due to the high lubricity **UNOPOL G 600** emulsions can be applied for drawing of profile and trolley wire. Moreover the product is used for drawing of bare and tinned copper wires on multi wire machines down to smallest diameters of 0,20 mm.

UNOPOL G 560

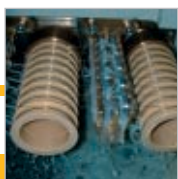
Mineral oil containing drawing lubricant for drawing of copper wire in rod breakdown systems and for medium wire drawing. Moreover **UNOPOL G 560** is used for wire drawing of bare, tinned and silver-plated copper wires in single and multi wire machines down to smallest diameters of 0,20 mm.



Fine wire drawing lubricants

UNOPOL F 811

Semi synthetic drawing lubricant for medium and fine drawing of bare, tinned, nickel- and silver-plated copper wires in single and multi wire systems down to smallest diameters of 0,10 mm, sometimes even down to 0,07 mm. Even for drawing of copper wire prior to enameling **UNOPOL F 811** is used.



Special lubricants for annealing

UNOPOL SPG 623

Water miscible, mineral oil containing, semi-synthetic drawing lubricant especially designed as an annealing fluid for continuous annealing in fine and superfine wire drawing. **UNOPOL SPG 623** contains a high level of copper inhibitors which protect the wire against discoloration after annealing.

Universal lubricants

UNOPOL U 570

Semi synthetic drawing lubricant for universal application in rod breakdown systems, as well as for medium and fine wire drawing. **UNOPOL U 570** is suitable for bare, tinned and silver-plated copper wires down to smallest diameters of 0,15 mm.



Fully synthetic lubricants

UNOPOL S 803

Mineral oil free, water soluble lubricant for drawing of bare and tinned copper wires in single and multi wire systems down to smallest diameters of 0,05 mm. Due to the well selected combination of synthetic lubrication additives, corrosion additives and surfactants solutions of **UNOPOL S 803** are not tacky, show little tendency to foam formation and offer excellent rinsing and cleaning properties.

UNOPOL S KD

Mineral oil free, water soluble lubricant for drawing of bare copper wires, copper alloys and precious metals down to smallest diameters of 0,02 mm. Due to its low ash content **UNOPOL S KD** is widely used for drawing of enameled wire.



Aluminium Wire Drawing

KUBITRAC AL 50

Viscosity at 40°C: 500 mm²/s

Non water miscible drawing oil which is used for wet drawing of aluminium and aluminium alloy wires in rod breakdown systems.

KUBITRAC AL 50 can be used for multiple drawing in dipping machines but also in drawing boxes.



KUBITRAC AL 20

Viscosity at 40°C: 200 mm²/s

Non water miscible drawing oil which is used for wet drawing of all types of aluminium and aluminium alloy wires in rod breakdown systems. **KUBITRAC AL 20** can be applied in dipping and spraying machines. In addition, it is used in medium wire systems down to final diameters of 0,60 mm. Its well selected combination of lubricating additives and inhibitors offers extremely stable viscosity, and long sump lives will be achieved.



KUBITRAC AL 10

Viscosity at 40°C: 100 mm²/s

Non water miscible drawing oil which is used for wet drawing of all types of aluminium and aluminium alloy wires in rod breakdown systems. **KUBITRAC AL 10** can be applied in dipping and spraying machines. In addition, it is used in medium wire systems down to final diameters of 0,40 mm. Its well selected combination of lubricating additives and inhibitors offers extremely stable viscosity, and long sump lives will be reached.



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«.

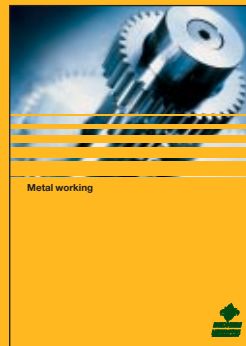
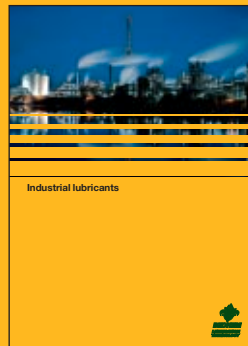
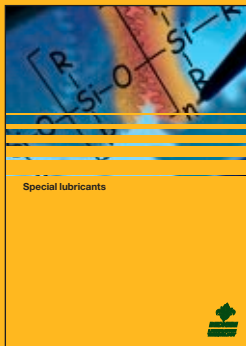
BECHEM special lubricants, industrial lubricants, metal working fluids and solutions for forming technology are based on our extensive experience in the development of special chemistry and latest tribologic knowledge. Our know-how with regard to friction, wear and lubrication always considers our customers' 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 China, as well as the Joint Ventures in the USA, South Africa, Sweden and Russia 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.



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



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