

# Klübercut CO 6-102

Metalworking oil



## Your benefits at a glance

- **Rapidly biodegradable**
- **Non-water polluting**
- **Environmentally compatible, no disposal**
- **Almost dry machines**
- **Almost dry tools and swarfs**
- **Low consumption**

## Your requirements - our solution

Klübercut CO 6-102 is a metal-working oil. It is environmentally compatible and can be used for metal cutting and punching processes. This high-quality metalworking oil is not miscible with water and is applied undiluted. The substances mentioned in the following are not contained in the formulation of this lubricant, however the occurrence of traces cannot be excluded.

- amines
- boron
- chlorine
- phosphor
- sulphur
- heavy metals
- silicone

and thus shows an almost neutral behaviour towards metals.

Klübercut CO 6-102 is classified as non-water polluting. At the same time, it is rapidly biodegradable. Apart from minute residue on the swarf, the product undergoes rapid biodegradation in the scrap phase and is transformed into a substance non hazardous to the environment.

## Application

The emphasis of application is in the range of easy to medium cutting processes, e.g. in

- drilling and boring
- milling
- sawing.

Klübercut CO 6-102 is suitable for a number of metals, particularly for

- Al and Al alloys
- nonferrous metals

but also for

- steels
- composite materials.

As Klübercut CO 6-102 is used undiluted, only a very small quantity is required on the friction point, i.e. the point of contact between the tool and the workpiece.

Micro-dosing constitutes a technical progress in the direction of environmental compatibility.

The advantages include:

- only minute oil residue remains on the swarf; the swarf can be directly transferred to the scrap cycle and be re-used;
- no disposal of coolants, no separation and disposal of used emulsions;
- clearly improved working environment; almost dry machines and components, less oil mist or oil vapour;
- improved tool life and surface quality; the undiluted metal-working oil reduces friction and heat generation.

## Application notes

The successful application of Klübercut CO 6-102 is based on using only minimal quantities by way of micro-dosage. This metalworking fluid proves its efficiency in lubrication with extremely small quantities and not in cooling with large quantities.

Klübercut CO 6-102 is applied to the area between the tool's cutting edge and the workpiece. The product's excellent lubricity permits reduction of the cutting speed and increase of the feed rate.

We will be pleased to assist you in selecting a suitable microdosing system.



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## Material safety data sheets

Material safety data sheets can be requested via our website [www.klueber.com](http://www.klueber.com). You may also obtain them through your contact person at Klüber Lubrication.

Pack sizes	Klübercut CO 6-102
Aerosol can 400 ml	-
Canister 5 l	+
Canister 20 l	+

Product data	Klübercut CO 6-102
Article number	046087
Colour space	yellow
Density, DIN 51757, 20 °C	approx. 0.92 g/cm <sup>3</sup>
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 34 mm <sup>2</sup> /s
Pour point, DIN ISO 3016	approx. -15 °C
Flash point, DIN EN ISO 2592, Cleveland, open-cup apparatus	approx. 300 °C
Biodegradability according to OECD 301 F, (within 28 days)	>= 60 %
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	12 months

## Klüber Lubrication – your global specialist

Innovative tribological solutions are our passion. Through personal contact and consultation, we help our customers to be successful worldwide, in all industries and markets. With our ambitious technical concepts and experienced, competent staff we have been fulfilling increasingly demanding requirements by manufacturing efficient high-performance lubricants for more than 80 years.

**Klüber Lubrication München SE & Co. KG / Geisenhausenerstraße 7 / 81379 München / Germany / phone +49 89 7876-0 / fax +49 89 7876-333.**

The data in this document is based on our general experience and knowledge at the time of publication and is intended to give information of possible applications to a reader with technical experience. It constitutes neither an assurance of product properties nor does it release the user from the obligation of performing preliminary field tests with the product selected for a specific application. All data are guide values which depend on the lubricant's composition, the intended use and the application method. The technical values of lubricants change depending on the mechanical, dynamical, chemical and thermal loads, time and pressure. These changes may affect the function of a component. We recommend contacting us to discuss your specific application. If possible we will be pleased to provide a sample for testing on request. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this document at any time without notice.

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