

Product Information

MULTIFUNCTION OIL – HYCUT® SYSTEM

HYCUT®

Multifunction oils are lubricants which fulfil a number of functions at the same time. The individual components of this modular system are designed to be compatible with one another. This permits not only mastery of different materials and different machining processes, but also ensures that the interfaces are carefully attuned to one another, along the complete process and transverse to it.

- Multifunction oils are self-emulsifying oils which are used
 - free of water as machining oil, forming lubricant, hydraulic oil and slide way oil
 - mixed with water as machining emulsion, pressure transfer fluid, and as washing and quenching medium.
- Multifunction oils solve interface problems between non-aqueous and aqueous systems.



HYCUT® CL 500

This product is a module within the HYCUT® multifunction oil system, and solves interface problems in the metal working industry by means of compatible product systems. The special-purpose cleaner HYCUT® CL 500 is especially suitable for cleaning work pieces which were machined with products of the multifunction oil system HYCUT®. Conventional extraneous oils (e.g. mineral oils) float to the top, and can easily be separated. The outstanding flushing and wetting behaviour ensure optimal cleaning result. The product gives a thin, dry film, for reliable corrosion protection.

APPLICATION AREA AND PROPERTIES:

- Cleaning of ferrous and non-ferrous metal surfaces
- Compatible with HYCUT® multifunction oil system
- Multiple use of flushing liquor by further use in HYCUT® machining emulsions
- Low-foaming, especially at temperatures > 50 °C
- Suitable for high-pressure systems
- Can also be used in systems with vacuum drying

RECOMMENDED APPLICATION CONCENTRATION:

Depending on process and requirements of the washing process

0.5 – 3%



Cooling • Lubricating • Removing Chips

STORAGE CONDITIONS:

The concentrate is to be stored at room temperature (ideal storage temperature is between +10 °C (50 °F) and +30 °C (86 °F)). Its guaranteed shelf life under the indicated conditions is 12 months.

INDUSTRIAL HEALTH AND SAFETY - ENVIRONMENTAL PROTECTION:

HYCUT® CL 500

- Is not obliged to be labelled under the dangerous substances ordinance
- Complies with German TRGS 611 (Prevention of Nitrosamine formation)

MIXING:

HYCUT® CL may be mixed by pouring all at once into prepared water or into the moving operating emulsion. As with cutting fluids, the best mixing method is to use a proportional mixing system.

TREATMENT AND DISPOSAL:

Water-mixed cleaners must be thoroughly processed before they are discharged to a receiving body of water or into surface water.

HYCUT® CL cleaners can be pre-treated according to the standard procedures to reduce the water content. All disposal procedures should be compliant with local waster regulations. Further use in HYCUT® emulsions is possible, observing the relevant requirements.



Cooling • Lubricating • Removing Chips

DATA OF CLEANER CONCENTRATE:

| Determination | Method | Unit | Value |
|------------------------------------------------|------------|----------------------|-------|
| Density, 20 °C | DIN 51 757 | [kg/m ³] | 1078 |
| Kin. viscosity, 40 °C | DIN 53 018 | [mm ² /s] | 8 |
| Refraction index, n _D ²⁰ | DIN 51 423 | --- | 1.417 |

DATA OF WATER-MIXED CLEANER:

| Determination | Method | Unit | Value |
|----------------|--------------|---------------|-------|
| pH value 2.5 % | DIN 51 369 | --- | 9.1 |
| Corrosion test | DIN 51 360/1 | [%wt] - S0/R0 | 3.0 |
| Corrosion test | DIN 51 360/2 | [%wt] - K0 | 3.0 |

FACTORS:

- Refractometer: 1.7
- Further factors available on request

The technical data in this specification are average values and are not legally binding.