

# TECHNICAL DATA SHEET

## CUT+COOL Perfect drilling and cutting oil

**Art. no. 0893 050 008**

P. Qty.: 1 / 6

### High-performance cutting oil for the heaviest machining work and higher cutting speeds

- High pressure absorption capacity
- Good corrosion protection
- Very favourable misting and evaporation behaviour
- Particularly mild inherent odour
- Resistant to resinification
- Free of chlorine, silicone, and heavy metals
- Free of substances that impair paint wetting

|                               |                                  |
|-------------------------------|----------------------------------|
| Contents                      | 400 ml                           |
| Container                     | Aerosol can                      |
| Colour                        | Yellow orange                    |
| Smell/fragrance               | Oil                              |
| Chemical basis                | Mineral oil with synthetic ester |
| Shelf life from production    | 24 Month                         |
| Density                       | 0.835 g/cm <sup>3</sup>          |
| Density conditions            | at 20 °C                         |
| Acid-free                     | Yes                              |
| Chlorine-free                 | Yes                              |
| Free from heavy metals        | Yes                              |
| Min. flashing point           | 170 °C                           |
| Silicone-free                 | Yes                              |
| Resin-free                    | Yes                              |
| Kinematic oil basis viscosity | 25 mm <sup>2</sup> /s            |



### Application area

Non-water-miscible coolant for machining and forming steel, high-alloyed steel, aluminium, non-ferrous base metal, titanium, carbide, cast iron, etc.

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|                                             | Drilling and cutting oil | Perfect drilling and cutting oil | Perfect drilling and cutting paste | Eco drilling and cutting oil | Drilling and cutting foam | DVGW cutting oil | Ultra cooling lubricant | Ultra HD cooling lubricant |
|---------------------------------------------|--------------------------|----------------------------------|------------------------------------|------------------------------|---------------------------|------------------|-------------------------|----------------------------|
| <b>Materials</b>                            |                          |                                  |                                    |                              |                           |                  |                         |                            |
| Steel, alloyed steel                        | xx                       | xxx                              | xxx                                | xxx                          | xxx                       | xx               | xx                      | xxx                        |
| high-alloy steel                            | xx                       | xxx                              | xxx                                | xxx                          | xxx                       | xx               | xx                      | xxx                        |
| Cast iron, grey cast iron                   | xx                       | xxx                              | xxx                                | xx                           | xxx                       | x                | xx                      | xxx                        |
| Tungsten carbide                            | xx                       | xxx                              | xxx                                | xx                           | xxx                       | x                | x                       | xx                         |
| Non-ferrous base metal (copper, brass etc.) | xx                       | xxx                              | xx                                 | xxx                          | xxx                       | x                | x                       | xx                         |
| Titanium                                    | x                        | xxx                              | xxx                                | xx                           | xxx                       | x                | x                       | xx                         |
| Magnesium                                   | x                        | xxx                              | xxx                                | xx                           | xxx                       | x                | x                       | xx                         |
| Aluminium, aluminium alloys                 | x                        | xxx                              | xxx                                | xx                           | xxx                       | x                | xx                      | xxx                        |
| <b>Machining processes</b>                  |                          |                                  |                                    |                              |                           |                  |                         |                            |
| Lathing, automatic lathes                   | xx                       | xxx                              | x                                  | x                            | x                         | x                | xx                      | xxx                        |
| Drilling, countersinking, reaming           | xx                       | xxx                              | xxx                                | xxx                          | xxx                       | x                | xx                      | xx                         |
| Deep drilling                               | x                        | xxx                              | xxx                                | xx                           | xx                        | x                | x                       | xx                         |
| Sawing                                      | xx                       | xxx                              | xx                                 | xxx                          | xxx                       | x                | xx                      | xx                         |
| Thread cutting                              | xx                       | xxx                              | xxx                                | xxx                          | xxx                       | xx               | xx                      | xx                         |
| Thread forming, rolling                     | xx                       | xxx                              | xxx                                | xxx                          | xxx                       | x                | x                       | xx                         |
| Milling                                     | x                        | xxx                              | x                                  | xx                           | xx                        | x                |                         | xxx                        |
| Sanding                                     | x                        | xxx                              | x                                  | x                            | x                         | x                | xxx                     | xx                         |
| Forming, rolling, bending                   | x                        | xxx                              | xx                                 | xx                           | xx                        | x                | x                       | xx                         |
| Punching, fine punching                     | x                        | xx                               | xx                                 | xx                           |                           | x                | x                       | x                          |
| Broaching, toothing                         | x                        | xxx                              | xx                                 | xxx                          | xxx                       | x                | x                       | x                          |
| <b>Features</b>                             |                          |                                  |                                    |                              |                           |                  |                         |                            |
| Basis                                       | Mineral oil              | Mineral oil with synth. ester    | Mineral oil with synth. ester      | Synth. ester                 | Glycol and ester          | Ester            | Mineral oil             | Mineral oil                |
| Viscosity (mm <sup>2</sup> /s)              | 12                       | 25                               | paste-like                         | 35                           | n/a                       | 5                | 66                      | 76                         |
| Minimum quantity lubrication                |                          | √                                |                                    | √                            |                           |                  |                         |                            |
| No mandatory warning symbols                |                          |                                  | √                                  | √                            |                           |                  | √                       | √                          |

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|---------------------------------------------------------------------------------------------------|--------------------------|----------------------------------|------------------------------------|------------------------------|---------------------------|------------------|-------------------------|----------------------------|
| <b>Materials</b>                                                                                  |                          |                                  |                                    |                              |                           |                  |                         |                            |
| Can be used overhead                                                                              |                          |                                  | √                                  |                              | √                         |                  |                         |                            |
| DVGW-approved                                                                                     |                          |                                  |                                    |                              |                           | √                |                         |                            |
| Biodegradable/approved for use with food                                                          |                          |                                  |                                    | √                            |                           |                  |                         |                            |
| Extremely high lubricating performance                                                            |                          | √                                | √                                  | √                            | √                         |                  |                         | √                          |
| Extremely long tool life                                                                          |                          | √                                | √                                  | √                            | √                         |                  | √                       | √                          |
| Low smoke generation                                                                              |                          | √                                | √                                  | √                            | √                         |                  | √                       | √                          |
| Extremely low consumption                                                                         |                          |                                  | √                                  | √                            | √                         |                  |                         | √                          |
| Good creeping properties                                                                          | √                        |                                  |                                    |                              |                           |                  |                         |                            |
| Free of boric acid                                                                                |                          |                                  | √                                  |                              | √                         |                  | √                       | √                          |
| Low-foaming                                                                                       |                          |                                  |                                    |                              |                           |                  | √                       | √                          |
| Extremely high microbial stability                                                                |                          |                                  |                                    |                              |                           |                  | √                       | √                          |
| Water hazard class                                                                                | 1                        | 1                                | 1                                  | 1                            | 2                         | 1                | 1                       | 1                          |
| Formaldehyde-free                                                                                 |                          |                                  | √                                  |                              | √                         |                  | √                       | √                          |
| Extremely gentle on the skin (amine-free)                                                         |                          |                                  | √                                  |                              |                           |                  | √                       | √                          |
| xxx excellent suitability<br>xx good suitability<br>x less favourable suitability<br>√ applicable |                          |                                  |                                    |                              |                           |                  |                         |                            |

## Application information

Ideal for all machining of all materials such as steel, high-alloyed steel, aluminium, non-ferrous base metals, titanium, carbide, cast iron, etc.

## Notice

Oil-soaked cleaning cloths should only be stored in non-flammable, self-sealing, tightly sealed, and appropriately labelled containers (BGI 560)! The machining oil is also available as an aerosol under the product name Cut & Cool Drilling and Cutting Oil Perfect - Spray (0893 050 008).

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The usage instructions are recommendations based on the tests we have conducted and our experience; carry out your own tests before each application. Due to the large number of applications and storage and processing conditions, we do not assume any liability for a specific application result. Insofar as our free customer service provides technical information or acts as an advisory service, no responsibility is assumed by this service except where the advice or information given falls within the scope of our specified, contractually agreed service or the advisor was acting deliberately. We guarantee consistent quality of our products. We reserve the right to make technical changes and further develop products.