

# Technical Information

## hebro®grind 251 AF

Water-soluble, mineral oil-free cooling lubricant

### Characteristic structure

Mineral oil	EP additive	Amine	Boron	Chlorine	FAD
-	-	-	-	-	x

hebro®grind 251 AF is a modern, synthetic cooling lubricant for grinding processes as well as light machining. The high-quality raw materials allow machining operations (such as flat and round grinding) with particular suitability for carbide and non-ferrous metals.

### Properties

- Excellent foaming behaviour
- Excellent flushing and drainage behaviour
- Forms stable solutions in almost all water hardness ranges
- Very good corrosion protection
- Very high long-term stability

### Technical data (typical values)

#### Concentrate

Colour	Mineral oil content	Viscosity at 20 °C (ASTM D 7042)	Density at 20°C (ASTM D 7042)
yellow, transparent	0%	22.5 mm <sup>2</sup> /sec	1.14

#### Solution (5%)

Colour	pH-value (Tap water)	Corrosion protection grade (DIN 51360-2)	Refractometer factor
yellowish, transparent	fresh: approx. 9.2 used: approx. 8.8	0≥4%	1.5

### Recommended concentration for application

- Carbides and non-ferrous metals, steel (mixed operation: aluminium, non-ferrous metals): 5-9%.

### Information

For mixing the solution, we recommend the use of modern cooling lubricant mixing devices (e.g., Dosatron); alternatively, the solution can also be mixed by slowly pouring it into drinking water while stirring thoroughly. For subsequent dosing, the available tap water must be treated according to quality in order to avoid any residues within the system. We recommend the usage of salt-free water this can be achieved by using ion exchangers or reverse osmosis systems. In addition, maintenance measures tailored to the process significantly increase the service life of the cooling lubricant solution.

The minimum shelf life in the sealed original container is 12 months from the date of production.

Store the product frost-free at 5-40°C.

The information provided in this data sheet is based on the properties and possible applications known to us. In general, however, no legal obligation can be derived from these data. We reserve the right to make changes to the product if these are necessary, owing to legislation or the discontinuation of raw materials.