

## HIGHTEC COOL MMS 1

Water-miscible, semi-synthetic cooling lubricant preferred for chip-removing processes.

### Description

HIGHTEC COOL MMS 1 is a water-miscible cooling lubricant containing mineral oils with an especially skin-friendly and virtually odourless formulation.

HIGHTEC COOL MMS 1 is free of readily nitrosatable amines (e.g. diethanolamine), chemicals that are easily absorbed through the skin and that then attack organs (such as monoethanolamine or monoisopropanolamine), hydro chlorofluorocarbons (e.g. PCB, PCT) and compounds containing silicone and nitrite.

### Application

HIGHTEC COOL MMS 1 forms a stable emulsion when mixed with water. HIGHTEC COOL MMS 1 displays a good starting ability, even with cold water.

HIGHTEC COOL MMS 1 is recommended for the machining of steel, stainless steel and cast iron. HIGHTEC COOL MMS 1 can also be used for aluminium and non-ferrous metals after a preliminary examination of the material compatibility.

### Benefits

- Good emulsion stability
- Very good corrosion protection
- High lubricating performance
- Good starting ability, even with cold mixing water
- Long service life (a service life of one year can be expected with proper care both in individual machines and in central systems)

### Typical characteristics

Property	Method	Unit	Value
Density at 20 °C	ASTM D1122	g/ml	0.955
Color	visuell	-	braun / brown
Kinematic viscosity KV 40	ASTM D-7042	mm <sup>2</sup> /s	37
Flash point	ASTM D-92 / DIN EN ISO 2592	°C	> 100
Shelf life	RLV (HIGHTEC - Laborvorschrift)	°C	5 - 35
Corrosion protection: Emulsion 3% with FLW (tap water from Flörsheim)	DIN 51 360 T.1	-	S0R0
Corrosion protection: Emulsion 3% with FLW (tap water from Flörsheim)	DIN 51 360 T.2	-	Note 0
Refractometer factor	-	-	1
pH of a 3% emulsion	-	-	8,7

The characteristics shown are typical of current production. This data cannot be constructed as a legally binding warranty or guaranty of certain product properties or of the suitability of the product for a specific application. ROWE products are continually improved. Therefore ROWE reserves the right to change all the technical data in this product information at any time without notice. All sales and deliveries shall be subject to our current General Terms and Conditions of Sale and Terms ([www.rowe-oil.com](http://www.rowe-oil.com)).

### Recommendation

Drilling, turning, cutting-off 3-6%  
Milling, sawing, thread cutting 5-10%  
Grinding 2.5-4%  
Mixing temperature range: 15-25°C

### Notices

Waste water treatment

- HIGHTEC COOL MMS 1 can be easily disposed of in modern splitting plants

General

- HIGHTEC COOL MMS 1 is not suitable for milling spheroidal graphite (e.g. GGG 40, GGG 60), carbides (dissolved cobalt is harmful to health) and magnesium (fire hazard!)

Storage

- When stored in dry, frost-free rooms and in original, unopened containers the storage period is: 9 months
- Temperature range: 5-35°C

