MAK HONEX D

High performance neat honing oil

MAK Honex D is a low viscosity, light coloured neat honing oil with a very low aromatic content. It is specially developed for honing and grinding operations. It is blended with highly refined mineral base stocks fortified with well-selected combination of polar, extreme pressure and anti-wear additives that provide particularly high load carrying properties. The absence of chlorine makes it easy to dispose. Lubricity additive ensures superior surface finish. It has excellent cooling efficiency due to low viscosity of the grade. It has extra fluidity to ensure quick and thorough flushing action required for honing and grinding applications.

Applications:

MAK Honex D is recommended for honing operations on a wide range of ferrous and non-ferrous materials where a high degree of finish is required. It is suitable for honing of nickel alloys, toughened steel, bearing steel and for super finishing operations where stones are used instead of tapes. Stand-alone machines as well as Machining Centers can make use of this oil. It is also recommended for finishing operations including Honing, grinding, drilling including carbide grinding. MAK Honex D can be used for general machining of aluminum and yellow metals and other machining operations requiring low viscosity oil.

Recommended Use	Cast Iron	Alloy Steel	Carbon Steel	Al. Alloy	Yellow Metals
Honing and Super finishing	√√	√√	√√	√	√√
Grinding	√√	√√	√√	√	√√
General Machining	--	--	--	√	√√
Drilling	--	--	--	√	√√

√√ Main applications, √ Check with supplier

Performance/ Benefits:

Low Viscosity and Excellent Flushing – extends honing stone life. Excellent cooling efficiency due to low viscosity. Readily removes chips. Ensures reduction in drag-out and lower consumption of oil.

Excellent Surface Wetting Property – Ensures superior surface finish and dimensional accuracy. Lowers coefficient of friction and formation of oil film under load.

Good Rust Protection – for both machine tools and work pieces.

Superior Surface Finish- excellent lubricity performance offers superior surface finish and dimensional accuracy. Reduces rejection.

Light Colour – ensures good visibility during the operation.

Low Oil Mist and Odour Characteristics – reduces oil consumption and provides good working environment.

Non Staining – does not leave stain either to work-piece or tool after machining

Specification:

- Proprietary Grade

Typical Physico-Chemical Data: MAK Honex D

Characteristics	Method	Value
Appearance	Visual	Clear
Colour	Visual	Light yellow
Density, g/cc @15^{O}C	ASTM D1298	0.824
Copper Corrosion, 100^{O}C, 3 hrs.	ASTM D130	1a
Flash Point, COC, ^{O}C	ASTM D92	136
Kinematic Viscosity @40^{O}C, cSt	ASTM D445	4.60

Additive:

Chlorine	Ester	Fatty Oil	Sulphur	Zinc	Phosphorus
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Storage & Handling:

The product should be stored inside. Keep it properly sealed to avoid contamination. Avoid freezing. Shelf life is 3 yrs. under protected storage conditions.

Health & Safety:

It is unlikely to be hazardous when properly used in recommended applications. Contamination of the oil from other oils, greases, chemicals, dirty water etc. can occur during the use. It should be avoided. Regular monitoring of the in-use product is recommended.

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