



EDOfluid MP

"Chlorine Free and ashless" multipurpose whole cutting oils

Description

The **EDOfluid MP** whole cutting oil range is formulated with solvent refined paraffin bases, and specially balanced additives to give high wear and tear resistance, *mild EP*, as well as excellent antifoaming, antioxidant and antirust properties. The **32, 46** oil grades are in fact **Multipurpose** fluids as they can perform simultaneously as ashless hydraulic oils, transfer oils, guide oils (in lighter processing) and cutting oils. This makes the fluids especially suitable for auto turning on multichuck lathes, where unintentional spillage of lubricant into the cutting oil is frequent, or for the new multiaxial workstations.

As the **EDOfluid MP** are free from chlorine and its by-products, they are the new solution to the problem of disposing of exhausted loads.

The fluids offer good thermal stability, low tendency to vaporisation; they do not emit unpleasant odours, do not stain white and yellow alloys and are highly filterable, even at less than 10µm. They also are hydrolysis problem free in presence of water or humidity, which can be adsorbed by the lubricant.

Properties and benefits

The **EDOfluid MP**, thanks to their formulation, guarantee the following properties and benefits:

- Excellent lubricating coolants.
- Suitable antiwear performances for processing of medium toughness metals.
- Great visibility of the processing area.
- Transparent light colour.
- Low odour emissions.
- Multipurpose application of grades **32, 46**.
- Yellow alloy compatible.
- Lower costs for disposal operations, as they are free from chlorine and its by-products.
- Rationalization of fluids on the same machine tool.
- Fast removal from swarfs and from workpieces, especially for the lower viscosity grades.
- Decrease of maintenance costs for cut-offs when electro clutches slide and for early wear of pumps, as filtering can be started at less than 10µm.

Applications

1. The **EDOfluid MP 22** is especially suitable for automatic turning of small details in medium toughness steels, yellow alloys, and for shaving.
2. **EDOfluid MP 32** and **46** are especially suitable for processing medium toughness metals, yellow and white alloys, as in turning, milling, tapping, cogging, etc. The fluids also answer the requirements for hydraulic oils found in specs DIN 51524/2, and have passed stage 12 of testing method FZG, as well as being classed ISO VG (oils for guides) and being suitable for lubricating cogs in machine tools.
3. The **EDOfluid MP 32** is also suitable as cutting oil on the "Gleason" tapping machines.

Storage, health and environmental safety

It is preferable to store **EDOfluid MP** indoors or under a shelter. If outdoor storage is unavoidable, please keep drums horizontal to avoid dampness or water infiltrations.



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There is no need for employing special means of protection during use of these products as they are free from hazardous components; it is however recommended to avoid frequent and prolonged contact with the fluids by using protective gloves or hand creams, as well as being mindful of normal personal hygiene and protection practices. It is recommended to check the safety data sheet issued.

Characteristics

EDOfluid MP			22	32	46
Characteristics	Test method	Unit of measure	Values		
Density at 15°C	ASTM D1298	kg/l	0.860	0.866	0.874
Kinematic viscosity at 40°C at 100°C	ASTM D445	cSt	22	32	46
		cSt	4.5	6	7.4
Viscosity index	ASTM D2270		> 100	> 100	> 100
Pour point	ASTM D97	°C	-12	-10	-9
Flammability VA	ASTM D 92	°C	220	230	240
Test FZG (A/8, 3/90) seizing load	DIN 51354/2	Stage	> 12		
Copper corrosion Test (3h at 100°C)	ASTM D 130		1 a		
Demulsion Test (Mercedes Benz) water % contents	DBL 6571/5		30		
BRUGGER test (maximum stress)		N/mm ²	50		

The above data are typical of production tolerance range and do not represent product specifications.