SPIRIT 7000 X

Metalworking

Mineral oil-free micro-emulsion specially designed for heavy machining of metals

APPLICATIONS

- SPIRIT 7000 X has been optimized for heavy machining of metals:

	Milling	Turning	Sawing	Reaming	Tapping	Threading	Broaching
Cast Iron	P	P	P	P	P	P	P
Low & Medium Alloyed Steels	R	R	R	R	R	R	R
High Alloyed & Stainless Steels	R	R	R	R	R	R	R
Titanium & Nickel Alloys	R	R	R	R	R	R	R
Aluminium (Si > 7 wt%)	R	R	R	R	R	R	R
Aluminium (Si < 7 wt%)	R	R	R	R	R	R	R
Yellow Metals	P	P	P	P	P	P	P

Recommended Possible

- **SPRIT 7000 X** contains specific EP additives to optimize lifetime of the tool and surface aspect of the metal parts
- Recommended concentration:
  - General machining : 5-7 v%
  - Heavy machining : 7-10 v%
- **SPIRIT 7000** X is suitable for water with hardness between 10 and 40 °F.

SPECIFICATIONS

- ISO 6743-7 : :ISO-L-MAF

ADVANTAGES

SPIRIT 7000 X has been developed to bring outstanding performances:

- many operations can be handled (metals, machining operations)
- it brings extended tool life leading to significant cost savings
- parts quality is enhanced
- drain intervals are increased thanks to outstanding resistance to bacteria and fungi
- it presents excellent resistance to corrosion (machines, metal parts)
- it is suitable for a broad range of water hardness

HEALTH AND SAFETY

SPIRIT 7000 X has been formulated with the safest molecules on the market.
SPIRIT 7000 X is a formaldehyde releaser, boron, chlorine, biocide and secondary amine free

TYPICAL CHARACTERISTICS	METHODS	UNITS	**SPIRIT 7000 X**
Density (@15°C)	ISO 12185	Kg/m^3	1020
pH (5 v%, NW 20)	DIN 51369	-	9.5
Refractometric factor	-	-	1.3
Breakpoint (NW 20)	DIN 51360/2	v%	4

Above characteristics are mean values given as an information.

RECOMMENDATIONS FOR USE

- The lifetime of the bath can be increased by close monitoring:
  - Concentration should be measured daily with refractometer (do not forget to multiply the reading value by the refractometric factor)
  - pH should be measured at least weekly
- Storage temperature : 5-40°C