

SPIRIT 7000



Metalworking



Micro-emulsion specially designed for heavy machining of metals.

APPLICATIONS

- SPIRIT 7000 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

- **SPIRIT 7000** 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** is suitable for water with hardness between 10 and 40 °F.

SPECIFICATIONS

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

ADVANTAGES

SPIRIT 7000 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 has been formulated with the safest molecules on the market.

SPIRIT 7000 is operator friendly :

- Boron-free
- Formaldehyde-free
- Formaldehyde releaser-free
- Chlorine-free
- Secondary amine-free

TYPICAL CHARACTERISTICS	METHODS	UNITS	SPIRIT 7000
Density (@ 15°C)	ISO 12185	Kg/m ³	975
pH (5 v%, NW 20)	DIN 51369	-	9.2
Refractometric factor	-	-	1.2
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.
- For more accurate analysis, the TOTAL SOLUBLE CHECK will give you more extensive data to prevent any kind of failure of the fluid. You can get in touch with your local TOTAL Sales Representative for further information.