



Spirit 3000

Non-foaming micro-emulsion for machining and grinding of ferrous metals

DESCRIPTION

Spirit 3000 is the latest generation of 'non-foaming' low oil micro-emulsion. Suitable for use with Soft (5°dH) to Hard (20°dH) water for first fill

Designed to run clean without sticky residues and high in-process corrosion protection. **Spirit 3000** offer best-in-class performance for machining of cast iron and powdered metal parts.

Thanks to remarkable flushing properties, **Spirit 3000** offers excellent performance in light duty grinding and super-finishing operations.

APPLICATIONS

Material	Grinding	Machining
Cast Iron	• • •	• • •
Mild Steels	• • •	• •
Stainless Steels	• • •	
Aluminum alloys (Si <7w%)		
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Titanium, Inconel, Aerospace alloys		
Copper/Brass		
• • • Designed for • • Suitable • Possible		

FEATURE > BENEFIT

- **Excellent Detergency** > Clean machines & Parts
- **High anti-corrosion** > Reduced rejections & rework cost
- **Remarkably low foaming** > No overflow + Better tool life
- **Excellent Contamination resistance** > High service life
- **Low oil content** > Reduced consumption

This lubricant used as recommended and for the application for which it has been designed does not present any particular risk. A material safety data sheet conforming to the regulations in use in the E.C. can be obtained from your local commercial advisor or downloaded at ms-sds.totalenergies.com

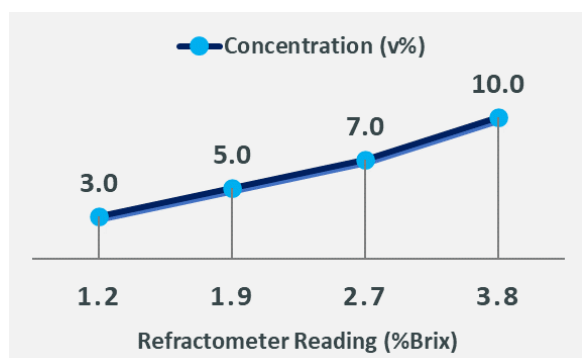
TYPICAL CHARACTERISTICS

Typical characteristics	Methods	Units	Spirit 3000
Density @ 15°C	ISO 12185	Kg/m ³	1011
Appearance 5 % Emulsion (in DM water)		--	Translucent
pH @ 5 %	DIN 51369	--	9.9
Corrosion Break point	DIN 51360/2	v%	4

The characteristics shown in this table are typical values given for illustrative purposes for EU

CONCENTRATION RECOMMENDATION

Application	Minimum	Maximum
Grinding	4 v%	5 v%
Machining	5 v%	10 v%



STORAGE AND HANDLING

- Always wear recommend personal protective equipment while operating.
- Ensure compliance with local regulation during disposal.
- Store in covered well ventilated area, ensuring no direct contact with sunlight, rain, or snow.
- Ideal storage temperature 5 °C to 40 °C.
- Shelf life: 12months from date of manufacturing.
- For optimum performance regularly monitor and maintain concentration and pH range as recommended.

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