



# 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%)		
Aluminum alloys (Si <7w%)		
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](http://ms-sds.totalenergies.com)

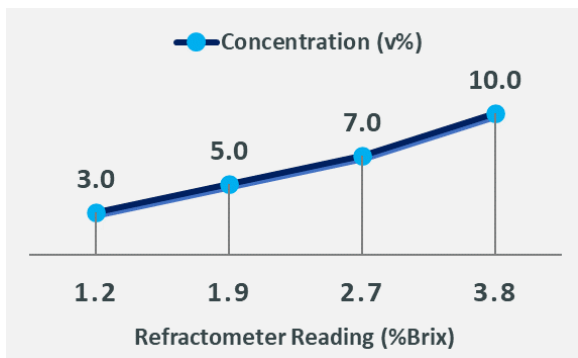
## TYPICAL CHARACTERISTICS

Typical characteristics	Methods	Units	Spirit 3000
Density @ 15°C	ISO 12185	Kg/m <sup>3</sup>	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.

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](https://ms-sds.totalenergies.com)