

# POLYBIO 535

## METAL WORKING FLUID \_ WATER SOLUBLE OIL

### PRESENTATION

**POLYBIO 535** is water soluble oil.  
Code ISO-L-MAA

### APPLICATIONS

- ❖ All kind of machining operations on cast iron, steel, stainless steel, and aluminum.
- ❖ Grinding operations.

### PRODUCT BENEFITS

- ✓ For soft water & hard water
- ✓ Good rust protection on cast iron & steel
- ✓ High mineral oil content

### ADVANTAGES

- **Performance:** **POLYBIO 535** is designed for medium duty machining operations.
- **Filtration:** minimum 25 µm. Filters of natural polyesters or polypropylene. The specific design limits filter consumption. This excellent filtration capacity allows preserving a very clean coolant, and the performances in time.
- **Friendly usage:** Odorless
- **Rust protection:** Excellent rust protection on sensitive ferrous materials like cast iron and steel.
- **Foaming:** High resistance to foaming :
  - ⇒ No foaming in soft water
  - ⇒ No "mechanical" foaming at high pressure
- **Degreasing:** compatible with alkaline cleaners

### CHARACTERISTICS

	Units	<b>POLYBIO 535</b>
<u><i>In it's pure state:</i></u>		
Appearance	/	Liquid
Color	/	Dark blonde
Specific gravity at 15°C	g / cm <sup>3</sup>	≈ 0.960
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	≈ 124
Temperature of storage	°C	5 to 40°C, keep away from freezing
Shelf Life		1 year under original packaging
<u><i>Diluted ratio 1:20 (5 %):</i></u>		
Appearance	/	Opalescent
Color (when in use)	/	White
pH	/	≈ 9.2
Refractometric coefficient	/	≈ 1
Actual concentration		Reading taken x Coefficient
<u><i>Concentration in use:</i></u>		
Steel machining	/	1:25 (4%) to 1:20 (5%)
Hard steel, stainless steel machining	/	1:20 (5%) to 1:10 (10%)
Aluminum machining	/	1:20 (5%) to 1:10 (10%)
Grinding	/	1:25 (4%)
<u><i>Behavior:</i></u>		
Steel corrosion	/	Minimum 1:33 (3%)
Copper corrosion	/	0-0
Aluminum corrosion, 2000 series	/	0-0
Foaming at 1:20, soft water 100 ppm (mg CaCO <sub>3</sub> /l)_10°TH_5.6°dH	/	300-300-5-0-240
Foaming at 1:20, hard water 1000 ppm (mg CaCO <sub>3</sub> /l)_100°TH_56°dH	/	300-180-0-1-250

*Above details are issued from a production average; they are not specifications*

### HEALTH AND SAFETY

☞ See MSDS (Material Safety Data Sheets)