



Polartech® 7501 Combined Emulsifier and Corrosion Inhibitor Package

Application

Polartech® 7501 is a cost effective package for the production of high oil water mix metalworking fluids. It is flexible for blend variations and compatible with a wide variety of base oils.

Typical applications include:

- General purpose milky soluble oils
- Soft and moderate hardness areas

Key Performance Benefits

- Concentrated emulsification system for the metalworking fluids formulators
- Very cost effective, low treat rate, simplification of manufacturing process
- Secondary amine free for use in TRGS 611 compliant products meeting requirement for the German market
- Boron free formulation
- Compatible with Cp and Cn base oils, providing flexibility for blend variations
- Good corrosion inhibitor, protecting machine tools and work pieces

Typical Blend Ratios

Polartech® 7501, %	18 – 20
Paraffinic Group I base oil, %	82 – 78

Typical Characteristics

Appearance:	Brown Fluid
Specific Gravity @ 20°C:	0.96
Acid Value, mg KOH/g:	25
Kinematic Viscosity at 40°C, cSt	82
Stability at 0°C and 40°C:	Stable fluid

Emulsion Quality and Stability

Emulsions quality and stability for a typical blend



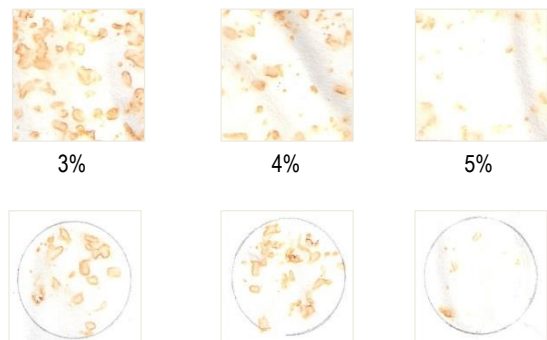
Deionised

200ppm CaCO₃

500ppm CaCO₃

Ferrous Corrosion Protection

IP287 and DIN 51360/2 Corrosion Test Results



3%

4%

5%

Galvanic Corrosion Protection

IP125 Galvanic Corrosion Results in 200ppm CaCO₃ (11dH)



3%

4%





Typical Blended Concentrate Characteristics

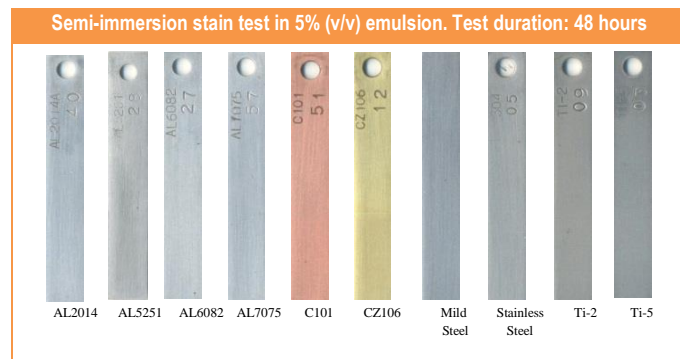
Concentrate

Appearance: Amber Fluid

Emulsion

Appearance: Good Milky
Emulsion Stability in 200ppm: Milky, stable
IP287, Break Point, %: 4.0
IP125, at 4%: 0/0-0
DIN 51 360 Pt II, % rating 0: 7.5
pH @ 5% in Deionised: 9.8
Multi-metal compatibility: No stain on a wide range of alloys

Multi-metal Compatibility



Storage

Store inside warehouse, ideally between 10°C and 30°C
Shelf life of 12 months from date of manufacture
Store out of direct sunlight
Avoid water collecting on barrel top