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EZ-MULZ™ 4037

Metal Processing

Premium Emulsifier Base for Naphthenic Oils

Application

EZ-Mulz 4037 is a unique, sulfonate-free emulsifier base designed to emulsify naphthenic oils with aniline points of 195° F or lower.

Based on nonionic and anionic emulsifiers, corrosion inhibitors, buffering agents and other component, EZ-Mulz 4037 is ideal for formulating soluble and semi-synthetic metalworking fluids.

EZ-Mulz 4037 is free from chlorine, nitrites, phenols and heavy metals and is non-staining on aluminum

Typical Properties

Test	Typical
Appearance	Clear, reddish liquid
Specific gravity at 25° C	0.965
Water wt. %	5.0
Total acid number, mg KOH/g	40
Total base number, mg KOH/g	58
pH at 5.0% in oil	8.7
pH at 1.0% in water	8.7

Benefits

- Excellent emulsion stability in all naphthenic oils
- Good lubricity and EP properties
- Low foam and hard water stable
- Good corrosion protection in for ferrous metals
- Compatible with extreme pressure additives such as chlorinated or sulfurized compounds

Performance

Corrosion on cast iron ships – ASTM D-4627-92
Ratings scale: 0 = no rust and 5 = 100% rust

5% emulsion of 15% EZ-Mulz 4037 in oil.....0

Typical Applications

General-purpose soluble oil

100 SUS naphthenic oil 81 - 85%

EZ-Mulz 4037 15%

Biocide 0 – 3%

Fungicide 0 – 1%

Heavy-duty soluble oil

100 SUS naphthenic oil 71 - 75%

EZ Mulz 4037 25%

Biocide 0 – 3%

Fungicide 0 – 1%

Semi-Synthetic Fluid Concentrate

Part I – Oil Phase

100 SUS naphthenic oil 44%

EZ Mulz 4037 50%

Biocide 5%

Fungicide 2%

Part II Add oil phase to water while mixing

Water 55-60%

Oil phase 40-45%

Recommended use of semi-synthetic concentrate

General machining 5-10%

Heavy-duty machining 10-20%

Storage and Handling

Recommended Maximum Long Term Storage Temperature*	Ambient
Recommended Minimum Temperature for Use	Ambient
Flash Point	>150°C COC

*Do not store with excessive heat (>150° F) over long periods.



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