



Polartech® 8142 Combined Emulsifier and Corrosion Inhibitor Package

Application

Polartech® 8142 is a superior quality package capable of producing a range of high performance, long service life fluids, utilising the highest quality additives to obtain stability in the concentrate and finished blends and the final emulsion.

Typical applications include:

- Semi synthetic watermix metalworking fluids

Key Performance Benefits

- Excellent emulsification
- Anionic and nonionic surfactant system
- Excellent corrosion inhibition
- Provides stable concentrates
- Inherently stable emulsions
- Versatile for combining with performance additives
- Cost effective, simplified fluid production
- Matching to group I paraffinic base oils

Basic Blend Ratios

Polartech® 8142, %:	50 – 55
Group I SN 150, %:	30 – 40
Water, %:	5 – 10

Typical Characteristics

Appearance:	Amber fluid
Specific Gravity at 20°C:	1.00
Total Alkalinity, % wt KOH:	1.3

Stability

Stability at 0°C:	Stable fluid
Stability at 40°C:	Stable fluid

Typical Finished Product Characteristics

Concentrate

Appearance:	Amber fluid
Stability at 0°C:	Stable fluid
Stability at 40°C:	Stable fluid

Emulsion

Appearance:	Translucent
IP 287, Break Point, %	2.0
pH:	9.5

Stability

200ppm CaCO ₃ :	Stable
500ppm CaCO ₃ :	Stable

Blending Advice:

1. The ideal blending temperature is between 20°C and 30°C
2. The base oil should be added to the blending vessel
3. Polartech® 8142 should be added slowly with good agitation
4. Continue with the performance additives, with good agitation
5. Finally add the water ensuring good agitation for a further period of 30 minutes

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

