



## Polartech® 8123 Combined Emulsifier and Corrosion Inhibitor Package

### Application

Polartech® 8123 is a cost effective package capable of producing long service life fluids, utilising the highest quality additives to obtain stability in the concentrate and finished blends and readily combine with performance additives to provide a comprehensive range of metalworking fluids.

Typical applications include:

- Low oil semi synthetic watermix metalworking fluids

### Key Performance Benefits

- No base oil compatibility issue
- Anionic and nonionic surfactant system
- Excellent corrosion inhibition
- Provides stable concentrates
- Inherently stable emulsions
- Extremely cost effective
- Simplified fluid production
- Easy incorporation of EP or lubricity

### Basic Blend Ratios

Polartech® 8123, %:	40
Soft water, %:	60

### Typical Characteristics

Appearance:	Amber fluid
Specific Gravity at 20°C:	1.02
Total Alkalinity, % wt KOH:	15

### 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, %	3.0
pH:	9.4

#### Stability

200ppm CaCO <sub>3</sub> :	Semi Translucent; stable
500ppm CaCO <sub>3</sub> :	Translucent / slightly opaque; stable

### Blending Advice:

1. The ideal blending temperature is between 20°C and 30°C
2. Polartech® 8123 should be added to the blending vessel
3. The good quality water should be added slowly with gentle agitation
4. Add the other additives if required, continuing the gentle agitation

### 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

