

## ECOCOOL GLOBAL 10

### Water-miscible coolant

#### Description

ECOCOOL GLOBAL 10 is designed to meet the national chemical registries of the world's major manufacturing markets while maintaining high performance in machining, foam control, hard water tolerance and pH stability.

ECOCOOL GLOBAL 10 is suitable for machining a wide range of materials. It contains a novel lubricity package that makes it especially effective for aluminium and titanium machining. Studies on both aluminium drilling and titanium milling show dramatic improvements in tool life and metal removal rates.

ECOCOOL GLOBAL 10 is a next generation water miscible coolant and employs raw materials that are intrinsically robust and provide long sump life. The emulsification system produces a tight stable emulsion that effectively tolerates tramp oils without producing objectionable residues.

#### How to Use

ECOCOOL GLOBAL 10 is mixed with water for use. Your local Fuchs representative can make specific recommendations for your operation. When mixing, always add ECOCOOL GLOBAL 10 concentrate to water.

#### Advantages/Benefits

- Contains lubricity enhancers
- Fine surface finishes/extended tool life
- Low foaming
- Suitable for high pressure coolant systems
- Multi-metal compatible
- One coolant can be used safely on a variety of materials
- Free of boron, chlorinated paraffin, silicone, secondary amines, triethanolamine, and formaldehyde donor biocides
- Meets the national chemical registries of Australia, Brazil, Canada, China, Europe, India, Indonesia, Israel, Japan, Malaysia, Mexico, Russia, Singapore, South Korea, South Africa, Taiwan, Thailand, Turkey, and USA
- ECOCOOL GLOBAL 10 meets the requirements of MBD PCS 4001
- Meets the requirements of Def Stan 91-70

#### Approvals

- Safran Landing Systems - PCS-4001 ind A
- Bombardier - BAMS 569-001 Class A
- Lockheed Martin - PS 22.02 - 11

#### How to Clean

ECOCOOL GLOBAL 10 residues are readily cleaned from parts using mild alkaline cleaner solutions.

## CHARACTERISTICS: ECOCOOL GLOBAL 10

Property	Unit	Data	Test method
Density at 15°C ( 59°F)	g/ml	0.98	DIN 51 757
Kinematic viscosity at 40°C ( 104°F)	mm <sup>2</sup> /s	55	DIN 51 562-1
Corrosion test emulsion > 5%	Corr.-grad	0-0	DIN 51 360-2
pH-value 5% emulsion		9.5	DIN 51 369
Handheld refractometer factor (Testroe)		1.3	FLV-T 5 *)

\*) FLV = Test procedure of FUCHS EUROPE SCHMIERSTOFFE GMBH

### Application concentration:

To ensure the optimum corrosion protection, we recommend a concentration of at least 5%.  
However, the ultimate concentration must also be compatible with the materials involved.

### Mixing temperatures:

The optimum mixing temperature for water and concentrate is 15–20 °C (59-68°F)

Changes in the colour of the water-miscible cutting fluid concentrate have no detrimental effect on the quality or the performance of the product.

As regards application, please observe current German VDI-Guidelines 3035, 3397 Sections 1–3 for perfect results.

Storage conditions: Protect from frost!