

ECOCOOL R - FERROSTAR

Description

ECOCOOL R - FERROSTAR is a premium-quality, mineral oil-based, water-miscible grinding and cutting fluid, optimised for machining of cast iron, nodular cast iron and steel.

ECOCOOL R - FERROSTAR produces a long-life, stable, finely dispersed emulsion when mixed with water. The use of high-quality and carefully matched base oils, emulsifiers, corrosion inhibitors and other additives give ECOCOOL R - FERROSTAR extraordinary properties.

In addition, the use of special primary amines in ECOCOOL R - FERROSTAR offers good skin compatibility even at high pH values.

Application

ECOCOOL R - FERROSTAR can be used for all roughing and final finishing operations on cast iron steel.

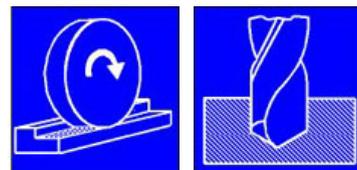
For fresh-fill we recommend a water hardness of at least 10°dH.

Advantages/Benefits

- Excellent washing effect
- High emulsion stability
- Excellent corrosion protection
- Low foaming
- High cutting performance
- Good cooling, wetting and flushing
- Keeps machines clean
- High stability without additives
- ECOCOOL R - FERROSTAR is free of secondary alkanolamines and alkanolamides. It conforms to German TRGS 611

Component Protection

Following manufacturing operations Fuchs recommends the use of our fully compatible RENOCLEAN cleaners and ANTICORIT corrosion preventives to clean and protect your components. Please refer to data sheets, or contact your local Fuchs Area Manager to discuss your requirements.



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Machine Cleaning

To optimise service life, the machine should be flushed thoroughly using RENOCLEAN SMC (see separate data sheet) prior to recharging with fresh fluid.

Coolant Monitoring

As with all modern cutting fluids, concentration control is of paramount importance, therefore regular check by use of a refractometer is recommended for this product. It should be noted that the individual product refractometer correction factor should always be used to ensure accuracy.

Other Services

A comprehensive range of coolant monitoring and maintenance systems are available from FUCHS Lubricants UK, incorporating coolant dispensing, recycling and disposal equipment.

Storage

Soluble oil concentrates may be damaged by frost. Store indoors at ambient temperatures.

CHARACTERISTICS: ECOCOOL R - FERROSTAR

Property	Unit	Data	Test method
Density at 15 °C	g/ml	approx. 0.98	DIN 51 757
Kinematic viscosity at 40 °C	mm ² /s	approx. 70	DIN 5 1 562-1

CHARACTERISTICS (Emulsion): ECOCOOL R - FERROSTAR

Corrosion test emulsion 2,5 %	degree of corrosion	0 – 0	DIN 51 360-2
pH value, 5 % emulsion		9.7	DIN 51 369
Recommended concentrations:			
Machining	%	3.5 – 10	
Grinding	%	3.5 – 5	
Handheld refractometer factor (Testroe)		1.1	FLV-T 5 *)

Note: Refractometer Reading x
Correction Factor = Actual
Concentration

*) FLV = Test procedure of FUCHS EUROPE SCHMIERSTOFFE GMBH

Application Concentration:

To ensure the optimum corrosion protection, we recommend a concentration of at least 3.5 %.

However, the ultimate concentration must also be compatible with the materials involved and the machining operation.

Mixing Temperature:

The optimum mixing temperature for water and concentrate is 15 - 20 °C.

Please do not hesitate to contact our Application Specialists.

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.

