

ECOCOOL 700 NBF

No foam, biocide-free coolant for use on all metals and applications

Description

With over 90 years experience in lubricant formulation, Fuchs has developed a unique water dilutable cutting fluid, ECOCOOL 700 NBF, designed to meet the increasing demands of industry.

ECOCOOL 700 NBF is especially well suited to applications where clarity and foam control are critical, forming a clear translucent solution in water, free from chlorine, nitries and phenols.

ECOCOOL 700 NBF is suitable for the machining of all ferrous and non-ferrous metals, from general to arduous machining applications.

Benefits

No foam

Higher pressures and flow rates in new machining equipment generates severe conditions for a metalworking fluid, with foam generation causing poor tool life, pump damage and safety concerns. ECOCOOL 700 NBF is non-foaming, protecting your personnel and equipment.

Biocide Free

Biocides used in water miscible cutting fluids are widely recognized as skin irritants and in sensitive individuals cause allergic reactions. Many biocides are also toxic to humans and the environment. ECOCOOL 700 NBF does not need or contain hazardous biocides as its biostatic nature restricts the development of both bacteria and fungus, extending the life of the fluid and avoiding the typical problems of bad odours and corrosion. Risk of skin irritations in the workplace is also dramatically reduced.

Superior corrosion protection

Exhaustive testing shows that ECOCOOL 700 NBF offers the best corrosion protection compared with similar premium quality products on the market even in poor quality water with high chloride/hardness. This allows use of lower dilution, reducing costs and the impact on the environment.

Rapid demulsification

ECOCOOL 700 NBF does not emulsify hydraulic oil, hence tramp oil is easily removed by oil-skimming devices and waste treatment is significantly easier.

Hard water stability

Water miscible cutting fluids commonly show instability under harsh conditions of hard water and high chloride content, often forming solid soaps that can deposit on machine surfaces and reduce corrosion protection. ECOCOOL 700 NBF shows exceptional stability in hard water (up to 400ppm water hardness / 100ppm chloride), ensuring machine surfaces are kept clean, and corrosion protection maintained.

Material compatibility

When used as recommended, compatible with natural rubber, nitrile, neoprene elastomers and plexiglass.

No odour – User friendly

All customers using ECOCOOL 700 NBF report significantly reduced odour in machine vicinity when compared to previous products in use.

Low dragout and evaporation

ECOCOOL 700 NBF does not evaporate which reduces coolant consumption by up to 50% or more. Water must be replaced to maintain desired cooling effect.

Excellent tool life

As with all Fuchs products, exceptional tool life is a given.

Application

Recommended concentrations:

- Normal machining operations approximately 3 – 5%
- Difficult machining operations 5 - 15%



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Characteristics

Property	Unit	Value	Test Method
Appearance		Clear, yellow liquid	Visual
Density @ 15 °C	Kg/L	0.962	DIN 51757
pH		9.7 (10%)	DIN 51 369
Emulsion appearance		Translucent	
Herbert Corrosion Test: 50ppm chloride/200ppm hardness	degree of corr.	<1 (5%, 2hrs)	IP287
Refractive index factor		1.08	