

# Product Data Sheet



Cool42/09-1

## Binol Cool 42

Binol Cool 42 is a water miscible cutting fluid of microemulsion type based on vegetable oil.

Binol Cool 42 is a general purpose cutting fluid for machining operations, such as grinding, milling, sawing, turning, drilling and tapping of cast iron, steel, stainless steel, yellow metals and aluminium alloys.

Recommended concentrations:	Grinding/light duty machining	4-5%
	General machining	5-7%
	Heavy duty machining	7-10%

### Physical and Chemical Data (typical)

Analysis	Method	Unit	Results
<b>Concentrate</b>			
Viscosity at 40°C	ISO 3104	mm <sup>2</sup> /s	150
Density at 20°C	ISO 3675	kg/m <sup>3</sup>	1090
pH	DIN 51 369		10,3
Boiling Point	Own	°C	approx. 100
Freezing Point	Own	°C	0
Colour	Optical		yellow/brown
Smell	Nasal		faint, amine related
<b>Emulsion (5%)</b>			
Appearance	Optical		transparent
pH fresh mix	DIN 51 369		9,4
pH after 48 h	DIN 51 369		9,3
Refractometer index, Fresh mix			1,2
Refractometer index, after 1 week			1,0

### Handling

- Storage Handling and storage between +5 to +40°C
- Packaging Drums at 200 l, plastic containers at 20 l. Bulk and IBC on request.

### Maintenance of emulsion

Binol Cool 42 is a concentrated fluid that has to be blended with water to an emulsion. For blending the emulsion, a diaphragm or ejector pump is recommended. When manual blending occurs, add the concentrate to water – not the way around!

Check the concentration at least twice a week with a refractometer to increase the sump life of the emulsion. If the concentration is too low, top up with fresh fluid. If too high, top up with for example 0,5-1% premixed emulsion – not only pure water. Regularly remove tramp oil from the surface of the tank, with e.g. a band skimmer.