

Product Information

WATER-MISCIBLE METALWORKING FLUIDS

ALUMET®

- A range of high performance products particularly suitable for use with hard to machine materials
- The combination of mineral oil with performance enhancing additives ensures outstanding lubrication in metal cutting or forming. Its modern emulsifier and stabiliser system provides long emulsion life for use in both stand-alone machines and central systems.
- All ALUMET® - cutting fluids are free of chlorine and nitrite and are also inhibited against nitrosamine formation.

ALUMET® AL 100

ALUMET® AL 100 is an all-purpose product used for machining and forming of ferrous and non-ferrous metals. The performance of the product is such that it can also be used on hard to machine materials.

APPLICATION AND PROPERTIES:

- For all metal machining applications
- Particularly recommended for aluminium and aluminium alloys chipping
- Longer sump life due to its high micro-biological stability
- Its high washing and flushing power ensures cleaner machines and work pieces
- Low foaming even with water hardness from 10 °d
- Excellent protection against corrosion



Cooling • Lubricating • Removing Chips

RECOMMENDED CONCENTRATION (DEPENDING ON PROCESS AND MATERIAL):

Grinding operations, light machining	Heavy machining
app. 4 %	5 – 10 %

PI ALUMET® AL 100 Art. No. 40870.14 Q. No. Q 983/0605 Print date 02.11.05, last update 02.11.05

STORAGE CONDITIONS:

The concentrate is to be stored at room temperature (ideal storage temperature is between +10 °C (50 °F) and +30 °C (86 °F)). Its guaranteed shelf life under the indicated conditions is 6 months.

INDUSTRIAL HEALTH AND SAFETY - ENVIRONMENTAL PROTECTION

ALUMET® AL 100

- Is not obliged to be labelled under the dangerous substances ordinance
- Complies with German TRGS 611 and is additionally inhibited with respect to nitrosamine formation

MIXING:

As with every water miscible metalworking fluid, it is important to observe the mixing sequence. As a basic principle always add the concentrate to the agitated mixing water. This is best achieved by using a proportional mixing system to ensure correct operating concentration.

TREATMENT AND DISPOSAL:

Used water miscible metal working fluids must be thoroughly processed before they are disposed of.

ALUMET® emulsions can be pre-treated according to the standard procedures (ultrafiltration, vaporiser, organic splitting) to reduce the water content. For more comprehensive information, please consult our technical service department.

All disposal procedures should be compliant with local waster regulations concerning mineral oil based products.



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DATA OF WATER-MISCIBLE CONCENTRATE:

Determination	Method	Unit	Value
Density, 20 °C	DIN 51 757	[kg/m ³]	986
Kin. viscosity, 20 °C	DIN 53 018	[mm ² /s]	90
Refractive, n _D ²⁰	DIN 51 423	---	1.456

DATA OF WATER-MIXED EMULSION:

Determination	Method	Unit	Value
pH-value 5.0 %	DIN 51 369	---	9.3
Corrosion test	DIN 51 360/1	[Gew.%] - S0/R0	2.0
Corrosion test	DIN 51 360/2	[Gew.%] - K0	4.0

FACTORS:

- Refractometer: 1.1
- Other factors on request

The technical data in this specification are average values and are not legally binding.