



DAPHNE ALPHACOOOL EX-1

~Working Environment improver EMULSION (Low Mist, Low Odor, Low Stickiness)~

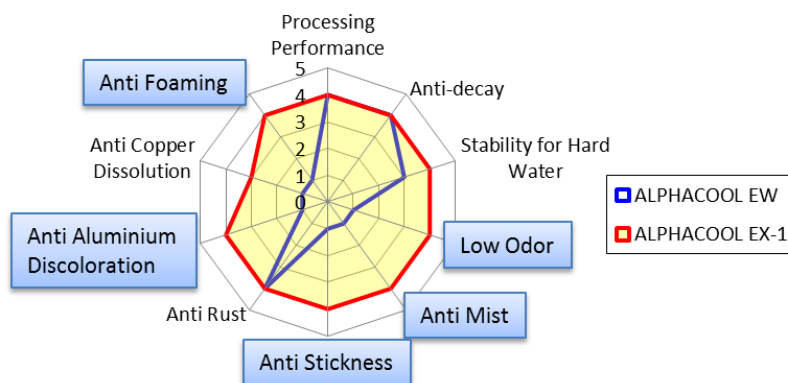
In recent years, higher quality coolant is demanded due to improvement of machine tool speed and efficiency. Cutting oils are demanded three performances described below.

- ① High Anti-foaming property
- ② Anti-scattering and anti-evaporation property
- ③ Available for multi work material (Steel, Aluminum, SUS, Copper etc.)

DAPHNE ALPHACOOOL EX-1 is an ideal coolant for high performance machine tool which has essential three properties.

1. Application

DAPHNE ALPHACOOOL EX-1 is an emulsion cutting fluid for aluminum alloy, steel, alloy steel, and copper. This product has excellent performance for turning, drilling, milling and other kinds of processing methods.



2. Essence

DAPHNE ALPHACOOOL EX-1 has a capability of prevention of emulsion break and prevention of decay which enlarge the product life. IDEMITSU's originally developed special surfactants and well-selected raw materials give this product to these capability described above. This product has anti-evaporation property and re-emulsifiability which prevents machine, tool, working floor become sticky. This ability leads your working environment better and safer. This product is available for not only steel but also non-steel metals because of high processing performance and lubricity.

3. Characteristics

- (1) New fatty acid has excellent lubricity, extends tool life, and improved finished surface.
- (2) Idemitsu original “Heat Resistant Technology” forms strong interaction of surfactants. This feature added this product heat stability, low evaporation, and anti-scattering property.
- (3) Extraordinary property of anti-forming which prevents overflow.
- (4) Excellent processing performance for steel and aluminum alloy.
- (5) The performance to prevent decay contributes to extend the life of fluid leads waste reduction.
- (6) Excellent cleaning property by using high stability raw material keeps machinery clean.
- (7) Emulsion break is prevented. This feature avoids from trouble of tool breakage when the machinery is starting up.
- (8) It is easy to make an emulsion regardless of the temperature or the hardness of water, because this product has excellent self-emulsification ability.
- (9) Poison substances are NOT included.

4. Attention

- (1) Emulsification must be prepared by ADDING UNDILUTED **DAPHNE ALPHACOOOL EX-1** to water. Dilution power must be between 2.5% and 10%.
- (2) Wear protective groves in order not to cause skin irritation. IF ON SKIN: Wash with plenty of water with soap.

5. Packaging

20 L pail and 200 L drum

Typical specification of DAPHNE ALPHACOOOL EX-1

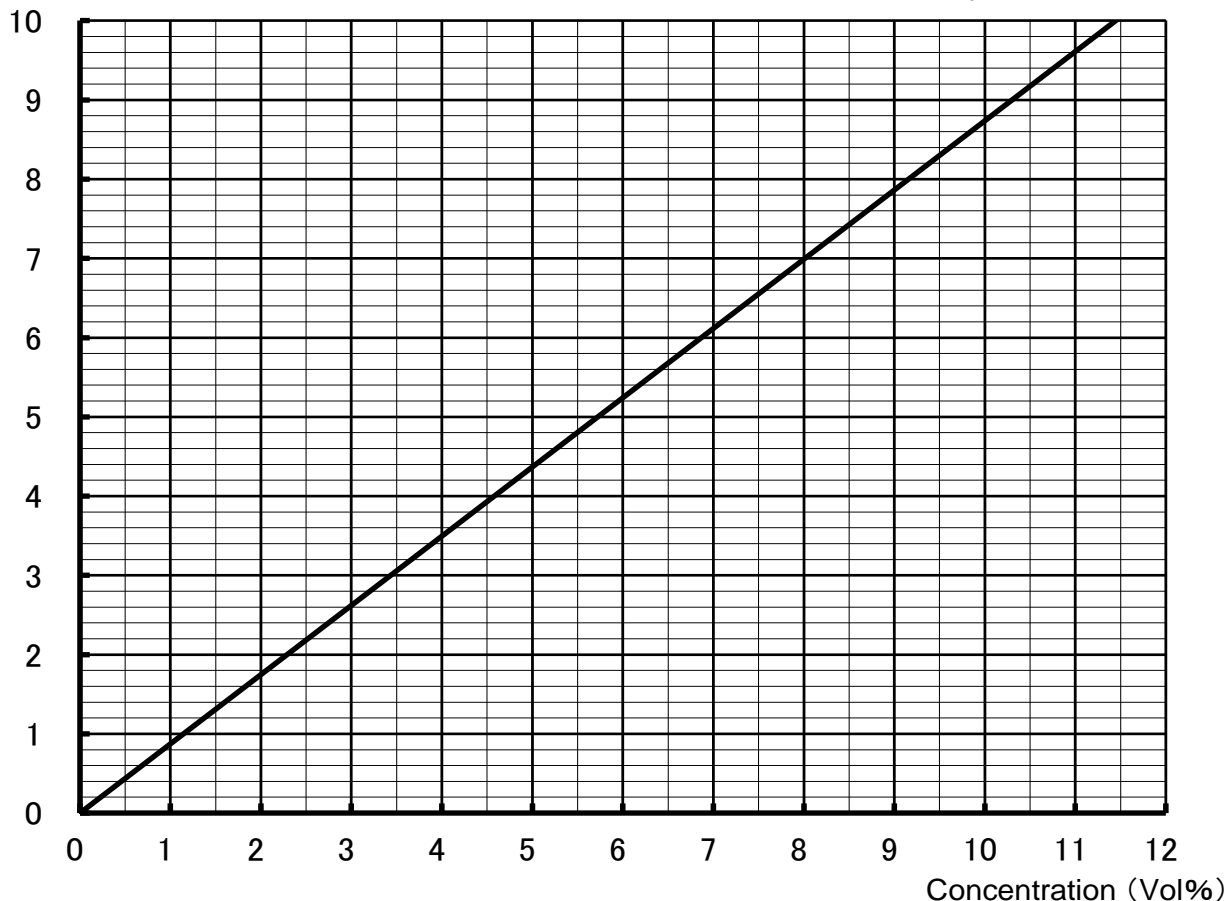
Test Item	Undiluted	5% solution with water	2% solution with water
Density [15°C] g/cm ³	0.9104	-	-
Color ASTM	0.5	-	-
Chlorine [ppm]	Not added	-	-
Boron [ppm]	Not added	-	-
Phosphorus [ppm]	Not added	-	-
Flush point [°C]@ C.O.C	-	-	-
pH	-	9.0	8.9
Anti-foam	-	5-0	5-0
Anti-rust (DIN method) @r.t.x2h	-	0	0

Brix-Conc. Diagram

Dn. ALPHACOOOL EX-1

ATC-Brix%

$$y = 0.8738x$$



- Please read carefully the precautions written on the container before use these products.
- Material Safety Data Sheet [(M)SDS] is available in English upon request. **Please access** <http://www.idemitsu.co.jp/e/lube/index.html>
- The performance and specifications are result of our tests, and are NOT a guarantee of accuracy and or completeness.

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