



Soluble Oil

Conoco Soluble Oil is a general-purpose oil suited for a wide variety of cutting and grinding operations that require a combination water-soluble lubricant and coolant.

Applications

Soluble Oil is a carefully balanced blend of a high-quality mineral oil and emulsifying agents. The recommended mixing ratio is 5 vol. % soluble oil to 95 vol. % water. The typical operating range is 3 vol. % soluble oil/97 vol. % water to 10 vol. % soluble oil/90 vol. % water. However, at the lower range of 3 vol. %, the antirust characteristics of the mixture may be reduced.

Two important maintenance items are vital for optimum Soluble Oil performance. First, maintain the correct oil-water ratio. Always add oil to water; never add water to oil. Water loss due to evaporation will enrich the emulsion, while filtration of used fluid will remove oil and dilute the emulsion. Second, institute a program to prevent the growth of odor-causing bacteria. This program should consist of regular treatment of the Soluble Oil system with a biocide and the periodic draining and cleaning of the system with a disinfectant solution, such as bleach. This maintenance program will bring maximum benefits from Soluble Oil.

Outstanding Features

- Extends tool life
- Excellent work finish
- Cools effectively
- Forms a stable emulsion
- Protects machined parts against rust

**Compounded,
Water-Emulsifying
Oil For
Metalworking**

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Soluble Oil
Typical Properties

ISO Grade	32
Density	
lb/gal	7.57
g/ml	0.91
Viscosity,	
cSt @ 40°C	28
cSt @ 100°C	4.6
SUS @ 100°F	133
SUS @ 210°F	41
Viscosity Index	61
ASTM Color	3.0
Emulsion Stability,	No free oil
95% Water-5% Oil	after 4 hours

Due to continual product research and development, the information contained herein is subject to change without notification.

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