



# Quantum Sapphire 3300 Cutting OIL

## Description

CUTTING OIL is soluble type cutting oil containing a wide variety of additive components selected for specific purpose and blended in controlled proportions with suitable biocide component.

CUTTING OIL is a general purpose soluble oil formulated for extra lubricity. It exhibits high levels of detergency and reserve alkalinity, low foaming tendencies, and contain a bactericide to combat a wide spectrum of micro-organisms commonly present in sump & reservoir.

## Benefits:

- Extra lubricity minimizes friction between the tool & work piece to facilitate machining at increased production rate.
- Gives improved precision & better surface finish.
- Improved cooling due to higher lubricity properties of the emulsion transfer heat from the cutting zone which ensure faster machining.
- Excellent Corrosion inhibition properties.
- Increased tool life.
- The balanced combination of base oil, emulsifiers and coupling agents produces stable, long lasting emulsions.

- Prevents against bacteria and fungus growth.

## Product Characteristics\*

## Application

CUTTING OIL is general-purpose, soluble type cutting oil for use with water of normal hardness. A dilution of 4% to 8% is suitable for the majority of application. It is advised to start with 4% and adjust as necessary. The emulsion is prepared by adding oil to water and not vice versa. It is non-staining and can be used on both ferrous and non-ferrous metals in a wide variety of machining operations including grinding, milling, turning and drilling.

CUTTING OIL is expected to provide a longer life and better emulsion stability.

PROPERTIES	UNITS	VALUE	TEST METHOD
Specific Gravity @ 15 °C	-	0.895	ASTM D-4052
Viscosity	@ 40 °C	mm <sup>2</sup> /s	ASTM D-445
	@ 100 °C	mm <sup>2</sup> /s	ASTM D-445
Flash Point (COC)	° C	136	ASTM D-92
Emulsion Test	-	Pass	-