

Soluble Light# 2

Metal Working Fluid with Bactericide



Features and Benefits

- Uses low pH corrosion inhibitors
- Resist demulsification
- Excellent hard water and well water stability
- Contains bio resistant ingredients
- Effectively forms a stable emulsion for maximum cooling benefit
- Versatile can be used for many machining operations

SOLUBLE 2 oil is a metal-working fluid designed to emulsify easily with water and is especially effective in the machining of ferrous metals. Suitable for the machining of nonferrous metals where some discoloration of the work-piece is acceptable. It has an effective rust inhibitor and a bactericide to prevent disagreeable odors. In its heaviest concentrations (10 parts water to 1 part oil) it is suitable for slow-speed, medium to heavy machining operations that include threading, tapping, drilling and broaching.

SOLUBLE 2 in lesser concentrations (20:1 or 30:1) is suitable for medium and high speed machining and gives very good results in finishing applications. The action of shearing a chip away from a metal surface, which is the basis of virtually all machining operations, generates heat. Unless this heat is removed it can affect the finish and shorten the tool life. A lubricant will help to reduce heat generation by reducing rubbing friction. Soluble oils have shown themselves to offer the best of both worlds. Heavy machining operations can cause the chip material to erode away the toolface and shorten tool life; an extreme pressure agent is helpful in reducing this damage.

For long fluid life it is very important to keep the fluid clean. The fluid should be filtered to remove swarf. The pH of the emulsion must be controlled to prevent the growth of bacteria and fungi otherwise they will weaken the emulsion, causing the oil to separate and releasing objectionable smells. The pH can be adjusted with the addition of a suitable agent. If an incorrect pH causes a problem, it can be corrected by adding a bactericide or fungicide. For stable emulsion, always start by adding the oil to water, about 1 part oil to 4 parts water; then dilute the emulsion with more water to the desired strength.

DO NOT LET SOLUBLE 2 FREEZE.

Recommended Uses

Application	Ratio (Water:Oil)
Drilling & Reaming	10:1 to 15:1
Turning & Sawing	15:1 to 30:1
Grinding	30:1 to 50:1
Milling & Boring	10:1 to 15:1

Typical Properties

Test	Typical Result
Colour	Amber
Viscosity @40°C (D445) (cSt)	23
Specific Gravity @ 15.6 (D1298) (°C)	0.890
pH @ 5% in Tap Water (FLA)	8.7
Flash Point (D92) (°C)	>154

Sizes and Codes

Soluble #2
210 L / 55.5 US Gal F0018151



Blending & Packaging
www.irvingblend.com
1.800.574.5823

Supporting data available to demonstrate appropriate performance.
Check with your Sales Representative for latest product approvals.
Please note, these are typical performance indicators and can change without notice.
This data sheet supersedes any previous version prior to 10/20/2018