

AGIP AQUAMET IFU



AGIP AQUAMET IFU is a EP type Emulsifiable biostatic oil suitable for metal-cutting operation. Manufactured from selected base stocks and additive pack containing a emulsifier which offers a very stable emulsion even in hard water. Offers effective metal protection and system maintenance as it contains carefully selected biocides and rust inhibitors thereby providing long emulsion life.

PERFORMANCE STANDARDS:

IS : 1115 – 1986*

CHARACTERISTICS (TYPICAL FIGURES)

AQUAMET IFU

Typical Characteristics	Reference Method	AQUAMET IFU
Appearance	Visual	
Density at 29.5°C, gm/cc	P - 16	0.889
Kinematic Viscosity @ 40° C ,cSt	P - 25	22.54
Emulsion test , 5:1 ration in Distilled Water 400 ppm Hard Water 750 ppm Hard Water	P - 98	Passes
PH of Emulsion test , 5:1 Distilled Water 400 ppm Hard Water 750 ppm Hard Water	ASTM D 70	9.7 9.0 8.5
Thermal Stability Test (at 0°C and 50°C)	P - 100	Passes
Cast Iron Corrosion Test	IP 125	Passes

* Exceeds the IS 1115 specs

PROPERTIES AND PERFORMANCE

- AGIP AQUAMET IFU gives rise to biostatic milky emulsions having high cooling power, good antirust performance and superior stability.
- The emulsions are stable in hard water, are highly resistant to bacterial breakdown and do not foam in soft waters.
- The EP property ensures better productivity
- Longer Grinding wheel life because of reduced wheel dressing
- The anti-wear characteristics, ensures quick swarf removal thereby increasing the tool life.
- Operator Friendly and Economical to use.

APPLICATIONS

AGIP AQUAMET IFU is recommended for variety of cutting operations on both ferrous and non ferrous metals. It can also be used for metals having a low machinability index, when high cooling power is required or with very hard water. It is an effective coolant for various operations such as turning, drilling, tapping, milling etc

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RECOMMENDED DILUTION CHART

Operation	Cast Iron	Stainless Steel	Non Ferrous
Turning	3-4%	4-5%	4-5%
Drilling	3-4%	4-5%	4-5%
Boring	3-4%	4-5%	4-5%
Milling	3-4%	4-5%	4-5%
Tapping	4-5%	5-7%	6-8%
Grinding	3-4%	3-4%	2-3%
Sawing	4-6%	5-7%	6-8%
Screw Cutting	4-6%	5-7%	6-8%

RECOMMENDED PROCEDURE:

Machine Preparation for Soluble Cutting oils:

- Circulate the system Cleaner in the coolant tank for 24 hours
- Scrub and clean the tank thoroughly. Ensure that all swarf and existing liquids are removed.
- Recharge the system with the proposed coolant at 1% concentration and circulate for 1 hour. Drain the coolant completely. Fill the system with the cutting fluid at correct concentration

Coolant Preparation:

- Always add oil to water. The mixing has to be either under agitation or with help of a mechanical storrer
- Do not make the emulsion in the machine sump directly
- Avoid using Galvanized containers.