

MOTOROL SOLCUT SOLUBLE CUTTING OIL

Introduction:

MOTOROL Solcut grade oils give milky white emulsion with antibacterial chemical, coupling agents and additives controlling rust and corrosion. It plays a vital role in accelerating the production rate by enabling increased rate of metal removal and by reducing or eliminating problems associated with severe and hazardous machine operation.

Applications:

MOTOROL Solcut grades are suitable for all metal and machinery operations where emulsifying oils are generally used for cooling. It is also recommended in turning, drilling, grinding boring and milling operation of ferrous and non-ferrous metals. Typical mixing ratio is 1 : 40 to 1 : 20 oil/water. Concentration varies depending on the type of machining, hardness of water and required corrosion protection.

Advantages:

- ◆ Protection from rust and corrosion
- ◆ Gentle to the hands of the operator and hence operator friendly
- ◆ Forms stable emulsion in water upto 600 ppm hardness (CaCO₃) (water softener recommended for water with hardness exceeding it)
- ◆ Good flushing action
- ◆ Does not decompose and retain physical properties
- ◆ Contain excellent bio-resistance properties leading to a long sump life
- ◆ Nitrite, silicone, phenol, chlorine and heavy metal free
- ◆ Produces outstanding finish surfaces

Performance Standard: Meets BIS:1115-1986.

Typical Specifications:

Characteristics	20	30	40	50	100
Color Max	4	5	5	5	5
Appearance	Dark Brown Clear Liquid				
Viscosity at 40°C (cSt)	20	30	40	50	100
PH of 5 % emulsion in water	8.0	8.5	8.5	8.5	9.5
Emulsion stability 24 hours in 600 ppm hardness (CaCO ₃) water	Stable	Stable	Stable	Stable	Stable
Cast Iron Corrosion Test	Passes	Passes	Passes	Passes	Passes
Heat Stability Test	Passes	Passes	Passes	Passes	Passes
Flash Point (°C), Min	150	180	200	200	200
Sp. Gravity at 30°C	0.850	0.880	0.880	0.880	0.890
Pour Point (°C), Max	(-)6	(-)6	(-)6	(-)6	(-)6

Environment, Health & Safety:

Every care has been taken to ensure the accuracy of the information in this PDS. This however may be affected by subsequent improvement in product (R&D). MSDS is available for all MOTOROL products on request. MOTOROL products are unlikely to present any health and safety hazard with proper use for the correct application and maintain proper personal hygiene. Do not spill oils on the shop floor, discharge into drains, ground or water sources.