

Puma HD Metal Cutting Fluid

Puma HD Metal Cutting Fluid: This product is formulated from solvent refined mineral oil and specialized, high performance extreme pressure (EP) additives. For overall performance Puma HD Metal Cutting Fluid contains emulsifiers, corrosion inhibitors, and extreme pressure lubricants. It can be used on a range of metal types inclusive of yellow metals. It contains a very effective biocide package which protects the in-use emulsion from both bacteria and fungus. Puma HD Metal Cutting Fluid is a heavy duty, high EP, soluble oil which forms a highly stable, semi translucent emulsion when mixed with water.

- ✓ Corrosion Resistance
- ✓ Extreme Pressure
- ✓ Stable Emulsion
- ✓ Effective Biocide
- ✓ Chemically Stable

Designed to Perform

Longer Equipment Life

Delivers improved thermal and chemical stability, under sever operational conditions; where load, pressure and temperatures place extreme stress on the oil. The formulations and additive technology provide superior protection against, corrosion, rust, emulsification, anti-foaming and the formation of oxidation decomposing contamination materials such as sludge and varnish.

Benefits

Puma HD Metal Cutting Fluid provides excellent emulsion stability in hard water up to 400ppm (expressed as calcium carbonate).

- Has excellent wetting characteristics
- Maximises tool life and provides an excellent surface finish
- Contains a fungicide and biocide to reduce spoilage and odours.
- Good corrosion inhibition to maintain a rust-free environment for machine tools and finished parts

Application

Puma HD Metal Cutting Fluid is a concentrate and must be mixed with water for use. To mix add the Puma HD Metal Cutting Fluid concentrate to water while mixing to form a stable milky emulsion. The dilute working solution should contain between 5 and 15% of the concentrate depending on the severity of the operation to be performed.

Typical Physical Characteristics

Appearance of Concentrate	Brown Oil
Specific Gravity @ 20°C	0.91
5% Emulsion Appearance	Milky White
RI Factor	1.42

These characteristics are typical of current product methods whilst future production will conform to Puma Lubricants specifications, variations in these physical characteristics may occur.

Recommended Dilution for Specified Applications

	Ferrous	Non Ferrous	Alloy
Tapping	5% to 7%	5% to 7%	5% to 10%
Broaching / Gear hobbing	5% to 7%	5% to 7%	5% to 10%
Threading	5% to 7%	5% to 7%	5% to 10%
Deep Hole Drilling/ Gun Drilling	5% to 7%	5% to 7%	5% to 10%
Stamping	5% to 7%	5% to 10%	
Grinding	5% to 7%	3% to 5%	
Sawing	5% to 7%	5% to 7%	
Milling	5% to 7%	5% to 7%	
Reaming	5% to 7%	5% to 7%	
Turning/Boring	5% to 7%	5% to 7%	
Drilling	5% to 7%	5% to 7%	
Screw Machining	5% to 7%	5% to 7%	

Health & Safety Environment

- This product is unlikely to present any significant health and safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.
- Avoid contact with eyes and skin, use proper impervious gloves with used oil. After skin contact, wash immediately with soap and water. Guidance on health and safety is available on the appropriate Safety Data Sheet (SDS) which can be obtained from pumaenergypng.datasheetdownloads.com , sds.pumaenergy.com.au.

Protect the Environment

- Take used oil to an authorized collection point. Do not discharge used or new oil into drains, soil or water.

Additional Information

- Technical advice on any applications not covered here may be obtained from your Puma Energy Representative.