

LUBRICUT 4280

SYNTHETIC METALWORKING FLUID FOR ALUMINUM MACHINING/GRINDING OPERATIONS

▶ PRODUCT DESCRIPTION

Lubricut 4280 is a moderate duty synthetic coolant formulated for the general machining and grinding of aluminum and non-ferrous alloys. Lubricut 4280 provides an optimum balance of lubricity and detergency for both machine cleanliness and high quality finishes on non-ferrous parts. Lubricut 4280 offers a unique blend of polymeric lubricants and surfactant technologies for optimum performance on most machining and grinding operations. The near neutral pH and special corrosion inhibitor blend offers excellent protection against staining of aluminum and non-ferrous alloys, making Lubricut 4280 the ideal fluid for use on sensitive non-ferrous aerospace alloys. Lubricut 4280 is stable in both hard and soft water and will not foam. Lubricut 4280 comes packaged as a highly concentrated form. Lubricut 4280 exhibits excellent lubrication based upon both laboratory microtap testing on aluminum alloys (percent tapping efficiency values of 120-126 versus 100-103 for a conventional (30% oil) semi-synthetic).

▶ FEATURED BENEFITS

- Outstanding corrosion protection for sensitive non-ferrous alloys
- Excellent lubricant film strength for good tool life and finish on aluminum alloys
- Excellent hard water stability
- High degree of cleanliness and no reportable VOC's for operator acceptance
- Excellent rejection of process oils and system contaminants
- Low foaming

▶ APPROVALS

- Not compliant for California SCAQMD Rule 1144

APPLICATION



COMPATIBLE METALS

Cast Iron
Carbon Steel
Tool Steel
Stainless Steel
Aluminum
Titanium
Inconel
Bronze
Copper
Brass

MACHINING CAPABILITIES

Milling
Turning
Sawing
Drilling
Reaming
Tapping
OD/ID/Centerless Grinding
Burnishing
Light Duty Hobbing & Broaching
Roll Forming
Medium-Duty Stamping & Drawing

ALL METAL SAFE

Yes

REFRACT FACTOR

2.0



TYPICAL PROPERTIES

Fluid Type	Synthetic metalworking fluid
Appearance (Concentrate)	Clear and amber fluid
Appearance (20% dilution)	Off-white and opaque
Specific Gravity, 60°F (15.6°C) / 60°F (15.6°C)	1.07
pH Neat	8.30
pH (20% dilution)	8.00
VOC, ASTM E 1868	111.6 grams/liter

Product must be stored indoors maintain at a temperature 50°–90°F.

PRODUCT APPLICATION / USAGE

Lubricut 4280 is recommended for the moderate duty machining and grinding of general aluminum alloys, non-ferrous and aerospace aluminum alloys, and tougher exotic alloys.

Operation	Aluminum Alloys	Cooper and Brass	Exotic Alloys
Milling, Drilling, Turning	9 – 15%	7 – 10%	10 – 16%
Reaming, Light Duty Broaching, Milling, Tapping, Sawing	8 – 15%	7 – 12%	9 – 15%
Grinding: I.D., O.D.	6 – 9%	6 – 8%	7 – 10%

MIXING DATA

Lubricut 4280 metalworking fluid is to be mixed with water for use. Always add product concentrate to the water, not water to product concentrate. Add with mild agitation. Product concentration can easily be monitored by refractometer.

Concentration	16.0%	12.0%	10.0%	8.0%	4.0%
Refractometer Reading	8.0	6.0	5.0	4.0	2.0

PRODUCT CODE

26663A0000

HEALTH AND SAFETY

For health and safety guidance, please refer to the Chemtool SDS (Safety Data Sheets).