

LUBRICUT 1050

ESA APPROVED MICRO EMULSION SEMI-SYNTHETIC MWF

▶ PRODUCT DESCRIPTION

Lubricut 1050 is a versatile, high-performance micro-emulsion, semi-synthetic based metalworking fluid designed for demanding precision aircraft applications used for tapping and broaching of both ferrous and aluminum alloys without the use of a chlorinated additive. Formulated with the latest chemical innovations for lubricity, wetting, and corrosion prevention available, Lubricut 1050 sets the standard for superior performance. The unique emulsifier and detergency package eliminates bacterial problems and hard water soap formation typically associated with traditional soluble oil metalworking fluids. When cleanliness and performance are your priorities, Lubricut 1050 is the product of choice.

▶ FEATURED BENEFITS

- High oil semi-synthetic for tough machining operations
- Pleasant odor and appearance
- Excellent corrosion protection on all metals
- Excellent bloom and mixing characteristics
- Balanced microbiological protection

▶ APPROVALS

- Compliant for California SCAQMD Rule 1144
- Pratt and Whitney: PMC 9397 Rev. H Semi-Synthetic Metalworking Fluid
- Pratt and Whitney: PWA 36604 Rev. B

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
Medium-Duty Stamping & Drawing

HIGH PRESSURE COOLANT CAPABILITY

Yes

ALL METAL SAFE

Yes

REFRACT INDEX

1.4



TYPICAL PROPERTIES

Fluid Type	Micro emulsion semi-synthetic
Appearance	Amber liquid
Odor	Mild chemical
Specific Gravity, 60°F (15.6°C)	1.0
Weight, 60°F (15.6°C)	8.33 lbs/gal.
Boiling Point	212°F (100°C)
Flash Point	None, self-extinguishing
Freezing Point	32°F (0°C)
pH (5% dilution)	9.2
VOC, ASTM E 1868	144.5 grams/liter

Product separates upon freezing. Thaw completely at room temperature and mix thoroughly prior to use.

PRODUCT APPLICATION / USAGE

Lubricut 1050 is recommended for general purpose machining and grinding of ferrous metals including carbon-cast steel, gray iron, and high nickel chrome alloy steels. Lubricut 1050 has ESA Engineering Source Approval and can be used in all applications requiring PMC 9397. Cut and roll tapping operations on aluminum alloys can be performed using the Lubricut 1050 at dilutions between 6 and 8%.

Operation	Carbon Steels, Malleable Iron, Cast Iron	High Alloy Steels	Aluminum Alloys
Milling, Drilling, Turning	5 – 6%	5 – 9%	5 – 9%
Reaming, Light Duty Broaching, Tapping, Sawing	6 – 9%	7 – 12%	7 – 15%
Grinding: I.D., O.D.	4 – 6%	5 – 6%	5 – 7%

MIXING DATA

Lubricut 1050 metalworking fluid is to be mixed with water for use. Always add product concentrate to the water. Product concentration can easily be monitored by refractometer or alkaline titration using the Chemtool titration kit.

Concentration	10%	6%	5%	4%	3%
Refractometer Reading	8.5	4.8	4.3	3.4	2.5
Droptst 0.5N HCL	14	9	8	7	6

PRODUCT CODE

2304800000

HEALTH AND SAFETY

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