

LUBRICUT 4410

SYNTHETIC METALWORKING FLUID
GENERAL OPERATIONS ON FERROUS METALS

▶ PRODUCT DESCRIPTION

Lubricut 4410 is a heavy duty synthetic coolant formulated for the machining of all ferrous metals. Lubricut 4410 provides an optimum balance of lubricity and detergency for both machine cleanliness and high quality finishes on machined parts. Lubricut 4410 has a unique blend of polymeric lubricants and extreme pressure additives for optimum performance on difficult operations. A balanced corrosion inhibitor package provides excellent protection against rust and corrosion of grey iron, cast iron, and steel alloys. Lubricut 4410 is stable in both hard and soft water and exhibits low foaming properties during use. Lubricut 4410 comes packaged as a highly concentrated form and can be used at leaner concentrations and still achieve optimum performance.

Lubricut 4410 does not leave a sticky or tacky residue on machined parts. The residue is very fluid and oil-like and will not gum up ways or stick switches. An enhanced biocide package prevents bacterial and fungal growth, resulting in longer sump life. Lubricut 4410 totally rejects tramp oils, which can be easily removed with standard oil removal systems. Lubricut 4410 is a premium, cost effective metalworking fluid designed to reduce consumption, improve performance, tool life, and finishes. Lubricut 4410 is an extremely versatile product and offers outstanding performance in both stand-alone and central systems.

▶ FEATURED BENEFITS

- New technology, synthetic fluid based upon polymeric lubricants
- Offers exceptional wetting and coverage properties on ferrous alloys
- Enhanced biostability for long performance life
- Extended extreme pressure lubrication chemistries
- Formulated with reserve alkalinity for stable pH values
- Excellent corrosion protection for ferrous metals
- Readily rejects all tramp oil contaminants
- Improved residue properties for effective housekeeping
- Low consumption rates—economical to use
- Outstanding product selection for fluid recycling systems
- Compatible with industry recycling systems
- Runs extremely clean: disperses swarf for effective removal by standard filtering methods
- Versatile fluid for all system sizes

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

Ferrous and occasional non-ferrous

REFRACT INDEX

2.35





TYPICAL PROPERTIES

Fluid Type	Synthetic
Appearance	Clear amber liquid
Odor	Neutral / mild chemical
Specific Gravity, 60°F (15.6°C)	1.06
Weight, lb/gal., 60°F (15.6°C)	8.80
pH (concentrate)	9.7
pH (5% dilution)	9.3
Rust Test: CIC; (3% in 27 grain H ₂ O)	None
Alkalinity	2.5 meq/g
Freeze/Thaw	Stable
Heat Stability	Pass

PRODUCT APPLICATION / USAGE

Lubricut 4410 is a very versatile product that achieves excellent results in a variety of machining and grinding operations on ferrous metals and alloys. Grinding operations should commence at starting concentrations of 5-7%. General machining operations should commence at concentrations of 7-10%. Moderate to heavy duty machining operations should start at 12-14%.

Operation	Cast Iron	Carbon Steels	High Alloy Steels
Milling, Drilling, Turning	5 – 7%	6 – 11%	6 – 12%
Reaming, Light Duty Broaching, Milling, Tapping, Sawing	6 – 9%	6 – 14%	6 – 15%
Grinding: I.D., O.D.	5 – 8%	5 – 8%	6 – 9%

MIXING DATA

Lubricut 4410 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	10%	8%	5%	4%	3%	2.5%	2%
Refractometer Reading	4.4	3.5	2.2	1.8	1.3	1.1	0.9
Drops 0.5N HCl	33	26	18	14	11	10	8

PRODUCT CODE

2691000000

HEALTH AND SAFETY

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