

Premier Poly-Cut™ & Poly-Cut™

MILD STEEL

Increase production through faster speeds and feeds via reduced temperatures at the cutting point due to better dissipation of heat with Premier Poly-Cut™ & Poly-Cut™.

STAINLESS STEEL; CHROMIUM BASE

Extend cutter life with Premier Poly-Cut™ and Poly-Cut's™ glycol additives, which dissipate heat better than soluble oil.

STAINLESS STEEL; NICKEL

Reduce build-up on cutters and improve the finish and tool life with Premier Poly-Cut™ and Poly-Cut's™ "EP Polymers."

ALUMINUM, ZINC AND COPPER ALLOYS

Improve finishes and tool life by eliminating chip build-up on cutters with our "EP Polymer". Premier Poly-Cut™ and Poly-Cut™ prevent oxidation (white rust) and inhibit electrolysis.

TITANIUM

Eliminate contamination due to the absence of free chlorine and sulfur in Premier Poly-Cut™ and Poly-Cut™. "EP Polymers" and glycol additives extend tool life significantly.

PLASTICS

Quadrant Engineering Plastic Products, recommends Poly-Cut™ in their design guides for machining plastics such as Torlon PAI, Ertalyte® PET-P, Duratron® PI, Celazole PBI and glass or carbon reinforced products. It will not contaminate nor craze Polycarbonate or other plastics.

CARBIDE

Premier Poly-Cut™ and Poly-Cut™ eliminate stress cracking with our sulfur-free formula.

Clean-running Premier Poly-Cut™ and Poly-Cut™ with our exclusive "EP Polymer", glycol additives and mild cleaning action clean dirty machines, prevent build-up, extend tool life and are safe to use on all metals and plastics.

Premier Poly-Cut™ and Poly-Cut™ are premium quality polymer-based lubricant/coolants. They provide maximum lubrication for extremely fine finishes on soft metals such as aluminum, copper and magnesium. They also provide excellent cooling properties at the chip/tool interface by preventing build-up on the cutter, significantly extending tool life.

Both Premier Poly-Cut™ & Poly-Cut™ do not contain wax, active or inactive sulfur, boron, phosphorous, Teflon®, silicone, halogens*, mercury or any heavy metals; therefore, they can be used on finished parts for atomic reactors, space craft, aircraft and jet or rocket engines.

*(Premier Poly-Cut™ & Poly-Cut™ contain 3PPm chloride and less than 1ppm fluoride.)

Premier Poly-Cut™ & Poly-Cut™ are clean to work with as they do not smoke and will not stain skin or clothing. When used in a spray mist, Premier Poly-Cut™ should be mixed 30 to 1 (1/4 cup Premier Poly-Cut™ per 1/2 gallon water). The spray mist will not fog up and form a cloud around the machine. It drops to the floor.

Premier Poly-Cut™ is very cost effective due to its extremely long sump life and versatile machining capabilities. Both Premier Poly-Cut™ & Poly-Cut™ have antibacterial and antifungal properties that are built in to inhibit the growth of bacteria and fungus that may affect these products. Since Premier Poly-Cut™ is safe to use on any metal or plastic in most machining operations we consider it to be the...

"One coolant for the whole shop."

Available in: 1-Gallon jugs, 5-Gallon Pails, 55-Gallon Drums

Premier Poly-Cut™ & Poly-Cut™ are, in fact, virtually the same product. The only difference between the two formulas is that Premier Poly-Cut™ has 2% of the antibacterial and anti-fungal ingredients and our original Poly-Cut™ formula has 1%. Poly-Cut™ is primarily used in band saws or other similar flood-type and spray mist operations where the coolant can not be completely recaptured. (Poly-Cut™ sold only in 55-gallon drums.)

MIXING DIRECTIONS

Water	Premier Poly-Cut™	Refractometer Reading (0-18) Scale
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CUTTING

Most Metals & Plastics	15	1	1 to 1.5
Metals Over 30 Rc	10	1	1.5 to 2
GRINDING	15	1	1 to 1.5

Special note on grinding... Premier Poly-Cut™ & Poly-Cut™ works best with vitrified wheels and, due to its cleaning action, it can be used to grind tool steel without loading.

DIRECTIONS FOR USE

Both Premier Poly-Cut™ & Poly-Cut™ mix readily with water and will not foam or rust under normal conditions. If you get foam, your mix is too rich. If you get rust, add more coolant. (Refractometer reading over 2.5 may cause foam and a reading of less than 1 may cause parts to rust.)

CAUTION STATEMENTS: Use on all machines except those which use the cutting oil to lubricate the machine. Premier Poly-Cut™ and Poly-Cut™ will remove lacquer and some urethane paints. They will not affect enamel or epoxy paints. Most machines are painted with enamel paints.

Refractometers with a (0-18) scale are available through your local supplier and are highly recommended for achieving the very best performance out of our products.

Poly Form™

FOR CNC TURRET PRESSES & HIGH SPEED PRESSES

Poly-Form™ has better viscosity than water-soluble oil and cools better than straight drawing oil so that it works very well for blanking and forming operations. Heat is limited so that the die does not fire. Poly-Form™ dries without spotting, therefore, it can be used in place of evaporating oils.

BLANKING ALUMINUM

Poly-Form™ is an excellent lubricant for soft non-ferrous metals such as aluminum, copper and brass. Its polymer lubricant has proven to reduce galling on punches and dies in these materials and will substantially increase tool life.

NO GALVANIC REACTION

Poly-Form™ contains two corrosion inhibitors, one each for both ferrous and non-ferrous metal; therefore, Poly-Form™ can be used without fear of staining or pitting galvanized steel, tin plate and aluminized steel.

PREFINISHED STAINLESS & CHROME

Poly-Form™ is highly recommended for blanking paper-masked prefinished stainless steel and chrome. The paper-masking will not be pulled off the metal by the die since Poly-Form™ does not saturate paper backing and break down the adhesive.

PRECOAT FOR DEEP DRAWING

Poly-Form™ acts as an excellent precoat when applied to metal and allowed to dry, particularly for deep draws of difficult metals such as titanium. Oil applies as metal enters the press. The oil slides on the polymer, not the metal, allowing a deeper draw.

FLOODING DIE

Poly-Form™ will stamp metals like Inconel® and draw-plated steels with ease by flooding the die.

Poly-Form™ is clean to work with. It is not sticky, does not smoke nor cause dermatitis. It leaves only a light film that does not interfere with welding. A mild alkaline bath will remove it if needed.

When using Poly-Form™ in a spray mist, it should be mixed 30 to 1 (1/4 cup Poly-Form™ per 1/2 gallon water). The spray mist will not fog up and form a cloud around the machine.

Poly-Form™ does not contain wax, active or inactive sulfur, boron, phosphorous, mercury or any heavy metals, Teflon®, silicone, or halogens*; therefore, it can be used on finished parts for atomic reactors, space craft, aircraft and jet or rocket engines.

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