

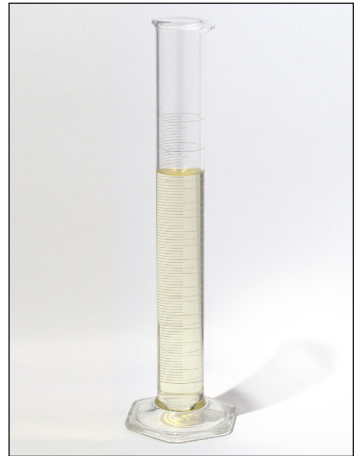


CITGO AUTOKUT® TRI-PURPOSE

Date 04/18

DESCRIPTION: CITGO Autokut Tri-Purpose is a transparent, non-corrosive, multi-purpose cutting oil. It is equally effective for use as a cutting oil and as a lubricant in screw machines and other automatic type machine tools.

- FEATURES:**
- Tri-functional, can be used as a gear lubricant, cutting oil and hydraulic fluid
 - Contains a stable oil mist suppressant
 - Contains advanced lubrication and anti-weld components
 - Compatible with all metals
 - Chlorine free
 - Light in color
 - Premium rust and oxidation protection

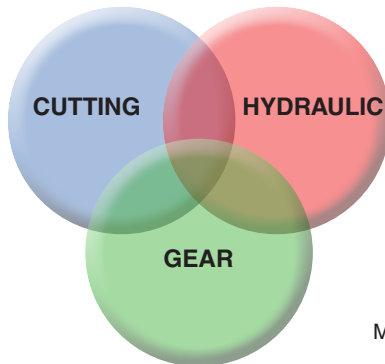


- BENEFITS:**
- Tri-functionality reduces costs by consolidating inventory and minimizing cross-contamination risks
 - Improves working environment and worker safety by minimizing mist formation
 - Improves productivity and lower costs of operation, with improved tool life and surface finish
 - Non staining on ferrous and non-ferrous metals
 - Benefits environmental needs and reduces disposal costs
 - Aids visibility of operation
 - Versatility in gear and hydraulic applications

APPLICATIONS: CITGO Autokut Tri-Purpose is a cutting oil, hydraulic fluid and a gear lubricant. It is specifically designed for automatic screw machines and is recommended for machining non-ferrous metals and ferrous alloys having machinability rating of approximately 50% or higher. It can be used in all automatic screw machines and in similar equipment for: Drilling, Counter-Boring, Turning, Shaving, Reaming, Tapping, Forming and Stamping.

Material Compatibility

	Recommended	Highly Recommended
P - Steels	[Color gradient from blue to yellow]	
M - Stainless Steel	[Color gradient from yellow to orange]	
K - Cast Iron	[Color gradient from red to orange]	
N - Non-ferrous	[Color gradient from green to yellow]	



Multi-use Fluid

(Continued)



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Date 04/18- (Continued)

TYPICAL PROPERTIES - CITGO AUTOKUT® TRI-PURPOSE

Material Code	639450001
Gravity, ASTM D4052, °API	32.5
Gravity, Specific, at 60°F, ASTM D1298	0.863
Density, lb/gal	7.2
Flash Point, ASTM D92, °F (°C)	406 (208)
Viscosity, ASTM D445, cSt at 40°C	29.8
cSt at 100°C	5.3
ASTM D2161, SUS at 100°F	154
SUS at 210°F	44
Color, ASTM D1500	2.5
Pour Point, ASTM D97, °F (°C)	-38 (-39)
Copper Corrosion, ASTM D130, 3 hrs at 210°F	1 A/B
Active Sulfur	No
Phosphorus	No
Lubricity Additive	Yes

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