

CITGO AUTOKUT® NC 400 SERIES



Date 01/05

DESCRIPTION: CITGO Autokut NC 400 Series Cutting Oils are non-staining, inactive oils formulated for a wide range of applications on non-ferrous as well as many ferrous metals. These products differ in viscosity and functional EP characteristics to provide optimum performance in the applications for which they are intended. They are formulated with no chlorinated compounds.

QUALITIES: CITGO Autokut NC 400 is a very low viscosity, light colored oil. Its blend of a fatty component and phosphorous gives the oil excellent lubricity as well as "mild" extreme pressure characteristics. CITGO Autokut NC 400 also contains a mist suppressant to aid in meeting OSHA requirements for air-borne mist concentration.

CITGO Autokut NC 420 is a light-to-medium-duty transparent cutting oil designed for severe duty applications. It is non-staining.

CITGO Autokut NC 425 is a light colored, mist-suppressed, triple-purpose oil (headstock, hydraulic, metalworking). This oil contains a higher level of non-staining extreme pressure agent to permit its use over a wide variety of materials, and over a wide range of cutting depths, feeds and speeds.

APPLICATIONS: CITGO Autokut NC 400 is primarily recommended for all machining operations on aluminum and magnesium and their alloys. This light viscosity product has additional applications in deep drilling and the honing of steel, cast iron and alloyed copper. It can also be used in automatic screw machines on non-ferrous metals and some free-machining steels where the requirements are not severe.

CITGO Autokut NC 420 is particularly well suited for operations where staining is objectionable. It can be used in screw machines on non-ferrous metals and steels where requirements are moderate.

CITGO Autokut NC 425 is a triple-purpose oil for use as the coolant or cutting fluid as well as a hydraulic and/or lubricating oil. It is adaptable to both non-ferrous and ferrous machining operations where staining is objectionable. The application scope of Autokut NC 425 includes turning, sawing, milling and drilling of non-ferrous metals as well as some plain carbon steels and free-machining steel alloys.

TYPICAL PROPERTIES:**CITGO AUTOKUT® NC 400 SERIES**

Grade	NC 400	NC 420	NC 425
Material Code	639401001	639421001	639426001
Gravity, ASTM D 4052, °API	33.7	31.7	29.9
Gravity, Specific, ASTM D 1298, 60/60°F	0.86	0.87	0.88
Density, lb/gal	7.1	7.2	7.3
Flash Point, COC, ASTM D 92, °F (°C)	329 (157)	406 (208)	433 (223)
Viscosity, cSt at 40°C	13	23	41
cSt at 100°C	3.2	4.5	6.5
SUS at 100°F	73.2	120	210
SUS at 210°F	37	41	48
Color, ASTM D 1500	1.0	2.0	2.0
Pour Point, ASTM D 97, °F(°C)	10 (-12)	-11 (-24)	5 (-15)
Copper Corrosion, ASTM D 130, 3 hrs at 212°	1B	1B	1A
Falex Load, ASTM D 3233, Lbs.	2250	3250	4000
Phosphorous, m%	0.06	0.11	0.15
Solution Stability, 24 hrs at 30°F	Pass	Pass	Pass
Fatty Materials, %	2.0	0.0	3.0