



CITGO AUTOKUT® NC 100 SERIES

Date 1/09

DESCRIPTION: This series of metal processing oils is highly active and does not contain added chlorinated compounds. Fluids in this group are formulated for machining operations involving alloyed, stainless and chrome steels. These products are intended for the most severe machining operations such as broaching, tapping and cold-heating. They contain a mist suppressant to aid in meeting OSHA requirements.

QUALITIES: CITGO Autokut NC 130 is a heavy-duty fluid with a higher level of additive treatment to provide more anti-weld capability than Cutting Oil 120.

CITGO Autokut NC 140 is a non-transparent heavy-duty fluid formulated to accommodate the most severe applications with respect to operation and metallurgy. The elevated amount of fat allows excellent surface finish at high feeds and speeds.

CITGO Autokut NC 150 is a non-transparent heavy-duty formulation for severe applications. A high level of fatty materials permits excellent surface finish.

NOTE: Since all of these fluids contain active sulfur, they should not be used with copper or copper alloys such as brass and bronze.

TYPICAL PROPERTIES:**CITGO AUTOKUT® NC 100 SERIES**

Grade	NC 130	NC 140	NC 150
Material Code	639132001	639142001	639152001
Gravity, ASTM D 4052, °API	30.4	28.9	26.2
Gravity, Specific, ASTM D 1298	0.874	0.881	0.897
Pounds Per Gallon	7.3	7.3	7.4
Flash Point, ASTM D 92, °F (°C)	381 (194)	388 (198)	381 (194)
Viscosity, ASTM D 445, cSt at 40°C	24.2	37.4	60.7
cSt at 100°C	4.69	6.19	8.61
SUS at 100°F	126	192	312
SUS at 210°F	42.0	47.0	55.2
Color, ASTM D 1500	L7	8	8
Pour Point, ASTM D 97, °F (°C)	5 (-15)	10 (-12)	16 (-9)
Total Sulfur, m%	2.9	3	4.9
Active Sulfur, m%	2.1	2.0	2.7
Phosphorous, m%	0.05	0.04	0.05
Lubricity Additive, %	3.0	6.0	12.0
Falex Load, ASTM D 3233, lbs	4000	>4500	>4500
4-Ball EP, ASTM D 2873, kfg	500	500	620
4-Ball Load Wear Index, ASTM D 2873	66.0	75.2	97.0