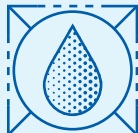




# CITGO® Tul-Kut® Oil Base Cutting Oil Concentrate

## OVERVIEW



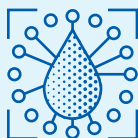
- A special additive concentrate designed for fortifying cutting oils in the field.
- Non-chlorinated formulation minimizes hazards to the environment.

## FEATURES & BENEFITS



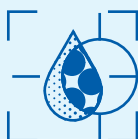
- Non-staining to yellow metals (copper and copper-containing alloys).
- Non-corrosive.
- Good solubility in mineral oil base fluids.
- Highly concentrated level of performance additive.
- Long history of proven performance.
- Non-chlorinated.

## APPLICATIONS



- Recommended to reformat cutting oils.
- Generally, 3 to 5 percent of concentrate is sufficient. Higher concentrations can be used for extremely difficult machining operations.
- Can be diluted with kerosene or low-viscosity oils to compound products when customers prefer to do their own blending for honing and lapping.

## PROPERTIES



### Typical Properties for CITGO Tul-Kut Oil Base:

Material Code	639565001
Gravity, ASTM D4052, °API	12.0
Gravity, Specific, 60/60°F, ASTM D1298	0.986
Density, lb/gal at 60°F	8.21
Flash Point, ASTM D92, °F (°C)	400 (204)
Viscosity ASTM D445	
cSt at 40°C	370
cSt at 100°C	40
Color, ASTM D1500	D8 (Dark)
Pour Point, ASTM D97 equivalent, °F (°C)	60 (16)
Sulfur, ASTM D2622, w%	10.5
Copper Corrosion, ASTM D130 (3 hrs. at 212°F, 10% in 100 SUS at 100°F base oil)	2

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