



# CITGO® Quenchoil®

## OVERVIEW



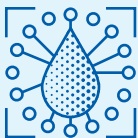
- Highly stable quench oils designed especially for use in steel heat treating operations.
- Formulated with premium high viscosity index base oils and additives to provide outstanding service life and performance.

## FEATURES & BENEFITS



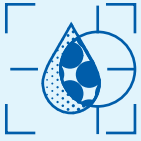
- Excellent thermal stability and oxidation resistance.
- Premium wetting ability and cooling capability.
- Uniform heat dissipation for quality hardened steel production.
- Less viscosity change during the quenching operation, as compared to low viscosity index oils.

## APPLICATIONS



- Recommended for superior service in steel quenching operations requiring a premium mineral quench oil.

## PROPERTIES



## Typical Properties for CITGO Quenchol:

	Quenchol 521	Quenchol 624
<b>Material Code</b>	<b>639465001</b>	<b>639466001</b>
Gravity, ASTM D4052, °API	33	31
Density, lb/gal at 60°F	7.2	7.3
Flash Point, ASTM D92, °F (°C), Min.	354 (179)	410 (210)
Viscosity ASTM D445		
cSt at 40°C	21	52.0
cSt at 100°C	4.2	7.4
Viscosity Index, ASTM D2270	104	104
Pour Point, ASTM D97, °F (°C)	16 (-9)	16 (-9)
Color, ASTM D1500	D8.0	D8.0
Quenching Time (Quenchemeter), ASTM D3520, Sec.(1)	16.1	17.0
Quenchalyzer, ASTM D6200:		
Max. Cooling Rate, °C/sec	95.79	83.74
Temp. at Max. Cooling Rate, °C	638.64	651.30
Cooling Rate at 300 °C, °C/sec	5.99	5.09
Time to reach 600 °C, sec	7.500	8.250
Time to reach 400 °C, sec	11.875	14.500
Time to reach 200 °C, sec	46.625	53.000

**Note:**

(1) Test method ASTM D3520 is no longer available. Values shown are for historic reference only.

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