

## CITGO QUENCHOL®

Date 08/13



**DESCRIPTION:** CITGO Quenchol 521 and 624 are highly stable quench oils designed especially for use in steel heat treating operations. They are formulated with premium high viscosity index base oils and additives to provide outstanding service life and performance.

**QUALITIES:** CITGO Quenchol products provide:

- 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 compared to low viscosity index oils

**APPLICATIONS:** CITGO Quenchol products offer superior service in steel quenching operations requiring a premium mineral quench oil.

**TYPICAL PROPERTIES:****CITGO QUENCHOL®**

	<b>Quenchol® 521</b>	<b>Quenchol® 624</b>
Material Code	639465001	639466001
Gravity, ASTM D 4052, °API	33	31
Density, lb/gal at 60°F	7.2	7.3
Flash Point, ASTM D 92, °F (°C), Min.	354 (179)	410 (210)
Viscosity:		
ASTM D 445, cSt at 40°C	21	52.0
cSt at 100°C	4.2	7.4
Viscosity Index, ASTM D 2270	104	104
Pour Point, ASTM D 97, °F (°C)	16 (-9)	16 (-9)
Color, ASTM D 1500	D8.0	D8.0
Quenching Time (Quenchometer), ASTM D 3520, Sec. <sup>(1)</sup>	16.1	17.0
Quenchalyzer, ASTM D 6200		
Max. Cooling Rate, °F/sec	184	158
Temp. at Max. Cooling Rate, °F	1178	1161
Cooling Rate at 512 °F, °F/sec	11.02	10.36
Time to reach 1112 °F, sec	7.500	8.625
Time to reach 752 °F, sec	11.875	14.125
Time to reach 392 °F, sec	45.625	51.750

**Note:**

(1) Test method ASTM D 3520 is no longer available. Values shown are for historic reference only.