

UniSource Energy, Inc.			
Inhibited Transformer Oil			
Specifications and Typical Inspections			
Supplier Name			UNISOURCE
Product Name			UNISHIELD®
			61 JS
Physical Properties	ASTM NO.		
Specific Gravity @ 60°F	D 1298		0.8871
Color, ASTM	D 1500		L 0.5
Viscosity, SSU @ 100°F	D 88		60.2
SSU @ 210°F	D 88		34
cSt @ 40°C	D 445		9.63
cSt @ 100°C	D 445		2.31
Aniline point, °F (°C)	D 611		167 (75)
Flash Point, COC, °F (°C)	D 92		300 (149)
Pour Point, °F (°C)	D 97		-76 (-60)
Chemical Properties			
Oxidation Inhibitor, wt %	D 2668		0.28
Sulfur, Wt. %	D 1275		Pass
Water, ppm	D 1533		< 30
Electrical Properties			
Dielectric break voltage @ 60 Hz	D 877		
Disc electrodes, kV			45
Power Factor @ 60 Hz, %	D 924		
@ 25°C			0.003
@ 100°C			0.074
Chemical Abstract #			64742-53-6
			Nov-03

The values shown here are representative of current production.
Some are controlled by manufacturing specifications, while others are not.
All may vary within modest ranges.