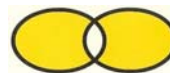


UniSource Energy, Inc.
Specialty Naphthenic Oil
Typical Properties



Supplier Name	UNISOURCE
Product Name	UNINAP® 2000 JS

Test Description	ASTM NO.	
Specific Gravity @ 60°/60°F	D 1298	0.9408
Gravity, °API @ 60°F	D 287	18.9
Density (Lb/Gal) @ 60°F	D 287	7.835
Color, ASTM	D 1500	L 4.5
Viscosity, SSU @ 100°F	D 88	2034
Viscosity, SSU @ 210°F	D 88	83.8
Viscosity, cSt @ 40°C	D 445	366.4
Viscosity, cSt @ 100°C	D 445	15.99
Viscosity Gravity Constant	D 2501	0.875
Aniline point, °F (°C)	D 611	177 (80.6)
Refractive Index @ 20°C	D 1747	1.5113
Flash Point, COC, °F (°C)	D 92	420 (216)
Pour Point, °F (°C)	D 97	30 (-1)
Chemical Composition, Vol. %		
Clay Gel Analysis	D 2007	
Saturates		49
Aromatics		45
Polar Compounds		6
Asphaltenes		ND
Carbon-Type Analysis, %	D 2140	
Ca		12
Cn		49
Cp		39

Chemical Abstract # 64741-96-4
Oct-11

*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.*