

## LUBBO<sup>™</sup> 3000

### Black Oil Specifications

This naphthenic-based black oil is a blend of hydrotreated base oils and heavy residuals.  
It is primarily developed as an aromatic replacement for use in the rubber industry.

TEST DESCRIPTION	TEST METHOD	MARKETING SPECIFICATIONS		TYPICAL VALUES
		Min	Max	
Physical properties				
Viscosity SUS@ 210°F	ASTM D 2161	90	140	128
Viscosity SUS@ 100°F	ASTM D 2161			3240
Viscosity cSt@ 40°C	ASTM D 445			587.10
Viscosity cSt@ 100°C	ASTM D 445			25.76
Specific Gravity 60/60°F	ASTM D 1250	.92	.95	.932
Flash, COC, °C (°F)	ASTM D 92	220(430)		240(460)
Color	ASTM D 1500			Black
Pour Point °C (°F)	ASTM D 97		-9(+15)	-12(+10)
Pounds per Gallon@60 °F	ASTM D 1250			7.762
Gravity, API, 60 °F	ASTM D 1250	17.5	22.3	20.3
Clay-Gel Analysis	ASTM D 2007			
Asphaltenes				1.5
Polars				5.8
Aromatics				41.1
Saturates				51.6
Polycyclic Aromatics	IP-346		3.0	2.2
PAH				
Benzo (a) anthracene				0.18
Benzo (a) pyrene				0.32
Benzo (b) fluorantene				0.45
				0.45
				0.45
				0.52
				0.03
				5.69
				8.09
	Total 10 ppm max.			