



## DONGNAM PETROLEUM - BASE OIL

### GROUP II

Test Items	ASTM	ESLUB B 290	ESLUB B 030	ESLUB B 040
Appearance	Visual	B&C	B&C	B&C
Density @ 15.6°C, kg/L	D1298	0.854	0.863	0.8731
Color (ASTM)	D1500	L0.5	L0.5	L0.5
Kinematic Viscosity @ 40°C, cSt	D445	20.94	30.47	95.86
Kinematic Viscosity @ 100°C, cSt	D445	4.236	5.189	11.24
Viscosity Index	D2270	107	101	96
Flash Point, COC, °C	D92	210	212	258
Pour Point, °C	D5950/6749	-15	-12	-14
Sulphur, wtppm	D5453	<10	<100	<100
Conradson Carbon Residue, wt%	D4530	<0.01	<0.01	0.01
Copper Strip Corrosion, 100°C, 3hr	D130	1b	1b	1b
Total Acid Number, mgKOH/g	D974	<0.01	<0.01	<0.01
Saturates, wt%	D2007	>90	>90	>90
Main Application		Transmission Oil	Engine Oil	Engine Oil, Marine Oil

Test Items	ASTM	ESLUB BW 060	ESLUB BW 080	ESLUB BW 090
Appearance	Visual	B&C	B&C	B&C
Density @ 15.6°C, kg/L	D1298	0.87	0.859	0.872
Saybolt Color	D156	30	30	30
Color (ASTM)	D1500	L0.5	L0.5	L0.5
Kinematic Viscosity @ 40°C, cSt	D445	8.74	29.7	96.4
Kinematic Viscosity @ 100°C, cSt	D445	2.32	5.2	11.3
Viscosity Index	D2270	67	105	104
Flash Point, COC, °C	D92	≥150	218	240
Pour Point, °C	D5950/6749	<-40	-18	-18
Sulphur, wtppm	D5453	<10	<10	2
Conradson Carbon Residue, wt%	D4530	<0.01	<0.01	<0.01
Copper Strip Corrosion, 100°C, 3 hrs	D130	1b	1b	1b
Total Acid Number, mgKOH/g	D974	<0.01	<0.01	<0.01
Noack Volatility, wt% (Procedure B)	D5800 (B)	-	15.8	6.9
CCS Viscosity @ -20°C, mPa-s	D5293	-	1,620	14,550
CCS Viscosity @ -25°C, mPa-s	D5293	-	2,760	26,000
Saturates, wt%	D2007	>99	99	99
Main Application		Transmission Oil	White Oil, Process Oil	White Oil, Process Oil

Test Items	ASTM	ESLUB BW 480	ESLUB BW 610	ESLUB BW 490
Color ASTM	D1500	L0.5	L0.5	L0.5
Viscosity @40°C	D445	29.1	51.5	102
Viscosity @100°C	D445	5.27	7.46	12.07
Viscosity Index	D2270	113	106	107
Pour point	D5950/6749	-17	-29	-14
Flash point	D92	226	242	275
Aromatics	D3238	0	0	0
CCR	D189	L0.01	L0.01	L0.01
TAN	D974	0.004	0.005	0.005
Noack Volatility	D5800	14	6.4	-