

<b>Straight-Grade Oils — Typical Properties<sup>1</sup></b>				
ASTM Tests		SAE GRADE / API SERVICE		
		30	40	50
		CF,CF-2/SJ	CF,CF-2/SJ	CF,CF-2/SJ
D-445	Viscosity			
	cSt @ 40°C	79	121	182
	cSt @ 100°C	10.6	13.6	17.9
	SSU @ 100°F	408	631	955
	SSU @ 210°F	63	74	92
D-2270	Viscosity Index	119	113	108
D-92	Flash Point °F	460	460	460
D-92	Fire Point °F	515	515	515
<sup>1</sup> ALL PROPERTIES ARE TYPICAL AND MAY VARY				
<b>Multi-Grade Oils — Typical Properties<sup>1</sup>, Part I</b>				
ASTM Tests		SAE GRADE / API SERVICE		
		5W20 <sup>2</sup>	5W30 <sup>2</sup>	10W30 <sup>2</sup>
		SL/GF-3	SL/GF-3	SL
D-445	Viscosity			
	cSt @ 40°C	49.5	65.3	70.3
	cSt @ 100°C	8.7	11	10.7
	SSU @ 100°F	253	332	360
	SSU @ 210°F	56	64	63
D-2270	Viscosity Index	156	161	141
D-4684	Pumping Viscosities			
	cP @ -35°C	22200	34800	—
	cP @ -30°C	—	—	18200
	cP @ -25°C	—	—	—
	cP @ -20°C	—	—	—
D-92	Flash Point °F	455	455	455
D-92	Fire Point °F	480	480	480
<sup>1</sup> ALL PROPERTIES ARE TYPICAL AND MAY VARY				
<sup>2</sup> API ENERGY CONSERVING				

<b>Multi-Grade Oils — Typical Properties<sup>1</sup>, Part II</b>				
		<b>SAE GRADE / API SERVICE</b>		
		<b>10W40</b>	<b>15W40<sup>3,4</sup></b>	<b>20W50</b>
ASTM Tests		CF,CF-2/SJ	CF-4, CG-4, 4,	CF,CF-4/SJ
D-445	Viscosity		CH-4, CI-4/SL, CI-4 PLUS	
	cSt @ 40°C	94	110.1	170
	cSt @ 100°C	13.8	14.9	20.2
	SSU @ 100°F	482	567	880
	SSU @ 210°F	75	79	102
D-2270	Viscosity Index	149	140	138
D-4684	Pumping Viscosities			
	cP @ -35°C	—	—	—
	cP @ -30°C	—	—	—
	cP @ -25°C	—	21100	—
	cP @ -20°C	—	—	18800
D-92	Flash Point °F	400	435	435
D-92	Fire Point °F	435	470	470
<sup>1</sup> ALL PROPERTIES ARE TYPICAL AND MAY VARY <sup>3</sup> FOR USE IN BOTH GASOLINE AND DIESEL ENGINES <sup>4</sup> MEETS DDC POWERGUARD 93K214 AND CUMMINS 20078 REQUIREMENTS				



