

Fig. 1

<u>Benchmark Formulation</u>	<u>Average Film (%)</u>	<u>Average Friction</u>	<u>Wear Scar Depth (μm)</u>
PAO 4	4	0.351	-9.63, -10.91
Partial Formulation	3	0.166	-2.77, -2.84
Full Formulation	31	0.104	-1.05, -1.21

Fig. 2

<u>Test Number</u>	<u>Capped MSP Additive</u>	<u>Concentration (weight %)</u>	<u>Average Film (%)</u>	<u>Average Friction</u>	<u>Wear Scar Depth (μm)</u>
1	Capped MSP 1	1.2	5	0.2	-2.43
2	Capped MSP 2	1.2	8	0.248	-3.74
3	Capped MSP 3	1.2	7	0.229	-3.42
4	Capped MSP 4	1.2	9	0.221	-3.12
5	Capped MSP 5	1.2	8	0.226	-2.57

Fig. 2 (Cont.)

<u>Test Number</u>	<u>Capped MSP Additive</u>	<u>Concentration (weight %)</u>	<u>Average Film (%)</u>	<u>Average Friction</u>	<u>Wear Scar Depth (μm)</u>
6	Capped MSP 6	1.2	6	0.19	-3.22
7	Capped MSP 7	1.2	9	0.183	-2.5
8	Capped MSP 8	1.2	5	0.348	-6.31
9	Capped MSP 9	1.2	97	0.065	-0.58
10	Capped MSP 9 (Retest)	1.2	3	0.192	-3.11

Fig. 3

<u>Test Number</u>	<u>Capped MSP Additive</u>	<u>Concentration (weight %)</u>	<u>Average Film (%)</u>	<u>Average Friction</u>	<u>Wear Scar Depth (μm)</u>
1	Capped MSP 1	1.2	4	0.164	-2.53
2	Capped MSP 2	1.2	3	0.162	-3.03
3	Capped MSP 3	1.2	4	0.159	-2.89
4	Capped MSP 4	1.2	4	0.162	-2.48
5	Capped MSP 5	1.2	3	0.165	-2.75

Fig. 3 (Cont.)

<u>Test Number</u>	<u>Capped MSP Additive</u>	<u>Concentration (weight %)</u>	<u>Average Film (%)</u>	<u>Average Friction</u>	<u>Wear Scar Depth (μm)</u>
6	Capped MSP 6	1.2	3	0.166	-2.81
7	Capped MSP 7	1.2	18	0.158	-2.18
8	Capped MSP 8	1.2	44	0.156	-1.21
9	Capped MSP 9	1.2	3	0.163	-3.07
10	Capped MSP 9 (Retest)	1.2	3	0.168	-2.79

Fig. 4

<u>Test Number</u>	<u>Capped MSP Additive</u>	<u>Concentration (weight %)</u>	<u>Average Film (%)</u>	<u>Average Friction</u>	<u>Wear Scar Depth (μm)</u>
1	Capped MSP 1	1.2	21	0.112	-1.12
2	Capped MSP 2	1.2	19	0.102	-1.03
3	Capped MSP 3	1.2	15	0.11	-1.15
4	Capped MSP 4	1.2	12	0.112	-1.12
5	Capped MSP 5	1.2	17	0.118	-1.23

Fig. 4 (Cont.)

<u>Test Number</u>	<u>Capped MSP Additive</u>	<u>Concentration (weight %)</u>	<u>Average Film (%)</u>	<u>Average Friction</u>	<u>Wear Scar Depth (μm)</u>
6	Capped MSP 6	1.2	21	0.093	-1.16
7	Capped MSP 7	1.2	23	0.093	-0.96
8	Capped MSP 8	1.2	18	0.096	-0.92
9	Capped MSP 9	1.2	20	0.104	-0.9
10	Capped MSP 9 (Retest)	1.2	47	0.115	-0.94