

OIL CENTER



OIL CENTER RESEARCH
INTERNATIONAL, L.L.C.

info@oilcenter.com | 337.993.3559 | 800.549.2407

GOM

PREVENTIVE MAINTENANCE

Liquid--Ring[®]

OIL CENTER RESEARCH INTERNATIONAL, L.L.C.

PREVENTIVE MAINTENANCE



PM100	<input checked="" type="checkbox"/>	
PM200	<input checked="" type="checkbox"/>	
PM322M	<input checked="" type="checkbox"/>	
PM420	<input checked="" type="checkbox"/>	
PM600	<input checked="" type="checkbox"/>	337.993.3559
PM800M	<input checked="" type="checkbox"/>	800.549.2407
PM900	<input checked="" type="checkbox"/>	info@oilcenter.com
PM1400L	<input checked="" type="checkbox"/>	
PM4000	<input checked="" type="checkbox"/>	
PM6000	<input checked="" type="checkbox"/>	



PM100 | AUTOMOTIVE & INDUSTRIAL GEAR OIL

PM100 Gear Oil is a heavy-duty, premium gear oil manufactured using highly-refined paraffinic base oils. PM100 Gear Oil is formulated with outstanding extreme pressure (EP) characteristics and load-carrying properties intended for use in all gearboxes. Extreme conditions, extended running times, and inclement weather conditions, are common in on and off-road operations—

PM100 Gear Oil was developed to protect gears from major problems, particularly water contamination, overheating, heavy loads, and wear. PM100 Gear Oil exceeds the demands placed on gear oil used in automotive and heavy-duty equipment.

AUTOMOTIVE

	PM10080W90	PM10085W140	SAE140	SAE250
ISO Grade	—	—	—	—
SAE Grade (Reference)	—	—	—	—
AGMA	5EP	7EP	7EP	8EP
Viscosity Index	90	94	94	98
Color	Green	Green	Green	Green
Density, lb/gal @ 77°F (25°C)	7.43	7.75	7.35	7.38
Specific Gravity @ 77°F (25°C)	—	—	—	—
Viscosity, ASTM D-445 cSt @ 40°C (104°F) cSt @ 100°C (212°F)	220 18	460 30	460 30	1000 46
Evaporation Loss, ASTM D-972 @ 210°F (98°C)	—	—	—	—
Flash Point, ASTM D-93	530°F (276°C)	530°F (276°C)	530°F (276°C)	530°F (276°C)
Fire Point, ASTM, D-92	>600°F (>315°C)	>600°F (>315°C)	>600°F (>315°C)	>600°F (>315°C)
Pour Point, ASTM D-97	-9°F (-24°C)	5°F (-15°C)	5°F (-15°C)	16°F (-9°C)
Rust Preventive Test, ASTM D-3603 @ 140°F (60°C)	Fresh—Pass Salt—Pass	Fresh—Pass Salt—Pass	Fresh—Pass Salt—Pass	Fresh—Pass Salt—Pass
Foam Test	Pass	Pass	Pass	Pass
D1401 Demulsibility @ 180°F (82°C)	Pass	Pass	Pass	Pass
Shelf Life (unopened container)	Two Years	Two Years	Two Years	Two Years

INDUSTRIAL

	PM100/32	PM100/46	PM100/68	PM100/100	PM100/150	PM100/220	PM100/320	PM100/460
ISO Grade	32	46	68	100	150	220	320	460
SAE Grade (Reference)	—	—	—	—	—	90	85W140	140
AGMA	—	1EP	2EP	3EP	4EP	5EP	6EP	7EP
Viscosity Index	111.38	164.13	142.08	110	111	90	95	94
Color	Green	Green	Green	Green	Green	Green	Green	Green
Density, lb/gal @ 77°F (25°C)	7.0	7.12	7.15	7.15	7.20	7.23	7.35	7.47
Specific Gravity @ 77°F (25°C)	0.838	0.853	0.856	0.85	0.86	0.86	0.88	0.89
Viscosity, ASTM D-445 cSt @ 40°C (104°F) cSt @ 100°C (212°F)	32 5.56	46 8.5	68 10.5	100 12	150 16	220 18	320 24	460 30
Evaporation Loss, ASTM D-972 @ 210°F (98°C)	1.05%	1.0%	0.98%	0.95%	0.90%	0.86%	0.64%	0.60%
Flash Point, ASTM D-93	530°F (276°C)	530°F (276°C)	530°F (276°C)	530°F (276°C)	530°F (276°C)	530°F (276°C)	530°F (276°C)	530°F (276°C)
Fire Point, ASTM, D-92	>600°F (>315°C)	>600°F (>315°C)	>600°F (>315°C)	>600°F (>315°C)	>600°F (>315°C)	>600°F (>315°C)	>600°F (>315°C)	>600°F (>315°C)
Pour Point, ASTM D-97	-15°F (-26°C)	-14°F (-25°C)	-12°F (-24°C)	-11°F (-27°C)	-8°F (-22°C)	0°F (-24°C)	1°F (-18°C)	7°F (-12°C)
Rust Preventive Test, ASTM D-3603 @ 140°F (60°C)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Foam Test	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
D1401 Demulsibility @ 180°F (82°C)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Shelf Life (unopened container)	Two Years	Two Years	Two Years	Two Years	Two Years	Two Years	Two Years	Two Years

PM100L | INDUSTRIAL & AUTOMOTIVE GEAR OIL

PM100L Gear Oil is a heavy-duty, premium, industrial quality gear oil manufactured using highly-refined paraffinic base oils. Made with LIQUILON®*, PM100L is formulated with outstanding extreme pressure (EP) characteristics and load-carrying properties intended for use in heavy-duty gearboxes. Extreme conditions like extended running times and inclement weather conditions are commonplace in today's manufacturing and oilfield industries. PM100L was developed to protect gears from major problems particularly water contamination, overheating, heavy loads, and wear. PM100L exceeds the demands placed on gear oil used in automotives and heavy-duty equipment.

(PM100L/80W90)

Color	Green
Active Component	LIQUILON®*
AGMA	5EP
Density, @ 77°F (25°C)	7.23
Specific Gravity	0.893
Flash Point, ASTM D-92	530°F (276°C)
Fire Point, ASTM D-92	>600°F (315°C)
Viscosity, cSt	
100°C (212°F)	18
40°C (104°F)	220
Viscosity Index	90
Pour Point, ASTM D-97	-15°F (-26°C)
Rust Test	
Fresh Water	Pass
Salt Water	Pass
Foam Test	Pass
Demulsibility,	
ASTM D-1401 @ 180°F (82°C)	Pass
Shelf Life (unopened container)	Two years

PM144 | TORSION FLUID

PM144 Torsion Fluid is formulated as a multipurpose lubricant for industrial tractors and farm equipment applications requiring a single oil to meet its power train requirements. PM144 Torsion Fluid is a premium quality fluid with unique performance characteristics making it acceptable for use in today's high tech on and off-highway equipment. It contains oxidation additives to resist degradation, anti-foam and low pour point for prompt lubrication needs at low temperatures. PM144 Torsion Fluid contains extreme pressure additive for increased load carrying capacity and wear production under heavy loads. It also possesses anti-rust protection to parts most susceptible to corrosion. PM144 Torsion Fluid provides a low coefficient of friction for hydraulic power shift transmissions, power take off systems and systems with wet brakes. It resists thinning at high temperatures and prevents dry starts with excellent adhesive and cohesive properties.

Because of its versatility PM144 Torsion Fluid is the type fluid often referred to as universal tractor transmission oil (UTTO) in North America and super tractor oil universal (STOU) in Europe.

Color	Amber
Density, lb/gal @ 77°F (25°C)	7.40
Specific Gravity @ 77°F (25°C)	0.887
Viscosity, cSt. @ 100° C (210°F)	9-11
Viscosity Index	140
Pour Point, ASTM D-97	-40°F (-40°C)
Rust Preventive Test, ASTM D-3603	Pass
Four Ball Wear, Scar diam (mm)	
1 hr, 65°C, 1500 rpm, 40 kg	0.35
Load Carrying Capacity, ASTM 2733	
Load Wear Index (kg)	57
Weld Load (kg)	251
Falex Pin Corrosion	Pass
Evaporation Loss (1%)	0.6
Water Tolerance	
Water Volume (%)	0.5
Sediment Volume (% max)	0.1
Water Separation	Trace
Wet Brake Chatter/Squawk	Pass
Shelf Life (unopened container)	Two years

PM200 | ENGINE GUARD

Extended Service Motor Oil For Gasoline and Diesel Engines

PM200 Engine Guard motor oil is blended from high quality base stock oils and additives that make it one of the top oils on the market. The high viscosity index allows the oil to maintain optimum performance at a broad range of temperatures. Designed for both gasoline and diesel engines, PM200 Engine Guard is convenient for companies that have a diverse fleet of vehicles. PM200 Engine Guard can be used in automobiles, heavy-duty trucks, and construction equipment. The multigrade 15W40 is ideal for locations that experience a variety of temperatures. The oil is thin enough for effortless cranking at low temperatures, yet thick enough to maintain lubrication at high temperatures. SAE 30, SAE 40, and SAE 50 grade oils exceed the demands placed on engine oil by

heavy-duty equipment. PM200 Engine Guard keeps carbon deposits to a minimum extending the life of pistons and seals. The superior oxidation stability of PM200 Engine Guard allows the oil to withstand the toughest of conditions. The lubricating properties reduce friction in the engine helping to maintain stable temperatures in all areas. PM200 Engine Guard covers all internal areas of the engine maintaining a film that not only prevents metal-to-metal contact but also protects against rust and corrosion. PM200 Engine Guard meets API performance requirements of gasoline engines (SJ). By also meeting the current API performance requirements for diesel engines (CH-4, CG-4, CF-4, CF-2, CF), PM200 Engine Guard is designed to meet the 1998 exhaust emission standards.

	SAE 30 (30 wt)	SAE 40 (40 wt)	SAE 50 (50 wt)	15W/40	20W/50
Gravity, @ 60°F (15°C)	26	26	25	28	26
Density, lb/gal @ 77°F (25°C)	7.43	7.45	7.51	7.40	7.41
Specific Gravity	0.89	0.89	0.90	0.88	0.89
Viscosity, ASTM D-445 cSt @ 40°C cSt @ 100°C	110 9.4–<12.5	152 12.6–<16.3	185 16.3–<21.9	114 12.6–<16.3	182 16.8–<22.7
Viscosity Index	117	112	110	135	130
Flash Point, ASTM D-92	400°F (204°C)	400°F (204°C)	400°F (204°C)	400°F (204°C)	400°F (204°C)
Fire Point, ASTM D-92	430°F (221°C)	430°F (221°C)	430°F (221°C)	430°F (221°C)	430°F (221°C)
Pour Point	-26°F (-32°C)	-12°F (-24°C)	-6°F (-21°C)	-22°F (-30°C)	-22°F (-30°C)
Sulfur Ash % wt	0.68	0.68	0.68	0.68	0.68
Zinc % wt	0.13	0.13	0.13	0.13	0.13
Shelf Life (unopened container)	Two years	Two years	Two years	Two years	Two years

PM322 | CABLE GUARD

Chain & Cable Lubricant

PM322 Cable Guard is an excellent chain and cable lubricant that provides superior rust protection and core lubrication. PM322 Cable Guard has excellent penetrating quality. PM322 Cable Guard dries to a flexible coating on the outside of cables, while staying soft on the inside to reduce friction between cables and strands. It adheres to cables and chains, reducing drip and waste in application with minimum downtime and maintenance cost.

Type	Asphaltic
Color	Black
Odor	Mild Hydrocarbon
Viscosity, Brookfield @ 77°F (25°C) #4 Ford Cup	15–17 sec
Density, lb/gal @ 77°F (25°C)	7.00
Specific Gravity @ 77°F (25°C)	0.839
Flash Point, ASTM D-93	105°F (40°C)
Dry Time, ASTM 5895	10–15 min
VOC, lb/gal	3.89
Shelf Life (unopened container)	Two years

PM322M | CABLE GUARD

Chain & Cable Lubricant with Liquid Moly

PM322M Cable Guard is an excellent chain and cable lubricant with liquid moly that provides superior rust protection and core lubrication. PM322M Cable Guard has an excellent penetrating quality. PM322M Cable Guard dries to a flexible, black coating on the outside of cables, while staying soft on the inside to reduce friction between cables and strands. PM322M Cable Guard adheres to cables and chains, reducing drip and waste in application with minimum downtime and maintenance cost.

Color	Black
Type	Asphaltic
Odor	Mild Hydrocarbon
Viscosity, Brookfield @ 77°F (25°C)	15–17 sec
Density, lb/gal @ 77°F (25°C)	7.28
Specific Gravity @ 77°F (25°C)	0.872
Flash Point, ASTM D-93	105°F (40°C)
VOC, lb/gal	3.89

PM400 | SOLV-EX

Outstanding Safety Solvent

PM400 Solv-Ex is a versatile solvent with countless industrial applications. It cleans without the usual shutdown or disassembly of equipment. PM400 Solv-Ex has a high dielectric strength and is both non-conductive and non-corrosive. This makes it useful in electronics applications. PM400 Solv-Ex effectively removes oil, grease, wax, and other oil-based soils. PM400 Solv-Ex is safer than carbon tetrachloride.

Odor	Very Mild
Gravity, API @ 60°F (15°C) D-287	10.6
Density, lb/gal @ 77°F (25°C)	8.70
Specific Gravity @ 77°F (25°C)	1.04
Flash Point, ASTM D-93	145°F (62°C)
Residue on Drying	None,
	No Rinsing Necessary
Evaporation Rate	Medium, Desirable
Corrosion	Harmless to Metals
Kauri-Butanol Value (D-1133)	56.7
Color-Saybolt (D-156)	+30
Shelf Life (unopened container)	One year

PM420 | ELECTRO-SOLVE

High Purity Safety Solvent

PM420 Electro-Solve, a dielectric safety solvent with a controlled evaporation rate, eliminates condensation caused by some solvents. Leaving a dry, film-free surface, PM420 Electro-Solve removes dust, oil, grease, wax, and other oil-based soils on contact. PM420 Electro-Solve has a dielectric strength of 29,000 volts in aerosol form and 36,700 in liquid, bulk form that saves costly disassembly and downtime for cleaning. PM420 Electro-Solve's special properties allow the user to apply PM420 Electro-Solve while electrical equipment is operating. PM420 Electro-Solve helps to loosen stubborn soils and wash them away.

A preventive maintenance program using PM420 Electro-Solve and MD50 will increase equipment life and reduce fire hazards by eliminating the buildup of dust, grease, and oil that can be ignited by sparks or arcs in electrical equipment. PM420 Electro-Solve causes no corrosion or etching and can be used on metal and painted surfaces. It may affect certain plastics.

Appearance	Clear Liquid
Specific Gravity @ 77°F (25°C)	1.45
Density, lb/gal @ 77°F (25°C)	12.10
Flash Point, ASTM D-92	None
Dielectric Constant	8.3
Dielectric Strength	
Aerosol	29,000 Volts
Bulk	36,700 Volts
Shelf Life (unopened container)	
Aerosol	One year
Bulk	One year

PM600 | MILITARY GREASE

PM600 is a heavy-duty, all-purpose lubricant manufactured specifically for bearings and open gears. PM600 is tacky and has very high shock-absorbing abilities with a high melting point of +500°F (260°C). PM600 is a grease manufactured with

exceptional adhesive and cohesive properties, allowing longer service intervals. PM600 forms a lubricating film that prevents metal-to-metal contact and reduces operating temperatures. It is water-resistant and protects against corrosion as it lubricates.

	PM600N000	PM600N00	PM600N0	PM600N1	PM600N2	PM600N3
Color	Red	Red	Red	Red	Red	Red
Texture	Tacky	Tacky	Tacky	Tacky	Tacky	Tacky
Penetration, ASTM D-217 @ 77°F (25°C)	445–475	400–430	355–385	310–340	265–295	220–250
Density, lb/gal @ 77°F (25°C)	7.40	7.42	7.44	7.46	7.47	7.50
Specific Gravity @ 77°F (25°C)	0.886	0.889	0.891	0.893	0.895	0.899
Flash Point, ASTM D-92	>400°F (>204°C)	>400°F (>204°C)	>400°F (>204°C)	>400°F (>204°C)	>400°F (>204°C)	>400°F (>204°C)
Dropping Point, ASTM D-2265	+500°F (+260°C)	+500°F (+260°C)	+500°F (+260°C)	+500°F (+260°C)	+500°F (+260°C)	+500°F (+260°C)
Water Washout, ASTM D-1264 @ 100°F (37°C)	6.0%	5.8%	5.8%	5.1%	4.8%	4.2%
Freezing Point	-17°F (-27°C)	-13°F (-25°C)	-4°F (-20°C)	-4°F (-20°C)	0°F (-17°C)	3°F (-16°C)
4-Ball EP Weld load, KgF (ASTM D-2596)	200 Pass 250 weld	200 Pass 250 weld	200 Pass 250 weld	200 Pass 250 weld	200 Pass 250 weld	200 Pass 250 weld
Evaporation Loss, ASTM D-972 @ 210°F (98°C)	1.30	1.30	1.28	1.20	1.15	1.00
Shelf Life (unopened container)	Two years	Two years	Two years	Two years	Two years	Two years

PM600M | PREMIUM GEAR AND BEARING GREASE with Moly

PM600M is a heavy-duty, all-purpose lubricant made with moly. It is tacky and has very high shock-absorbing abilities. PM600M is manufactured with exceptional adhesive and cohesive properties, allowing longer service intervals. PM600M forms a

lubricating film that prevents metal-to-metal contact and reduces operating temperatures. It is non-melting, water resistant, and protects against corrosion as it lubricates. PM600M is available in NLGI grades 1, 2, and 3.

	PM600MN1	PM600MN2	PM600MN3
NLGI Grade	1	2	3
Color	Gray	Gray	Gray
Texture	Tacky	Tacky	Tacky
Penetration, ASTM D-217 @ 77°F (25°C)	310–340	265–295	220–250
Density, lb/gal @ 77°F (25°C)	7.29	7.39	7.75
Specific Gravity @ 77°F (25°C)	0.92	0.92	0.92
Viscosity Index of Oil	95	95	95
Flash Point, ASTM D-92	>450°F (>232°C)	>450°F (>232°C)	>450°F (>232°C)
Dropping Point, ASTM D-2265	+500°F (+260°C)	+500°F (+260°C)	+500°F (+260°C)
Freezing Point	14°F (-10°C)	14°F (-10°C)	14°F (-10°C)
4-Ball EP Weld load, KgF (ASTM D-2596)	200 Pass 250 weld	200 Pass 250 weld	200 Pass 250 weld
Shelf Life (unopened container)	Two years	Two years	Two years

PM60D | DIESEL FUEL CONDITIONER

PM60D Diesel Fuel Conditioner eliminates a variety of problems in the storage, transportation, and combustion of diesel fuels. Fuel stability is increased with the use of PM60D Diesel Fuel Conditioner by preventing sludge formation. It also helps to disperse existing sludge in the fuel system. Corrosion and plugging problems associated with water in fuels are prevented with PM60D Diesel Fuel Conditioner. This outstanding product emulsifies water, preventing its accumulation in the fuel system. It also helps to inhibit corrosion by producing a protective film on metal surfaces in the system. PM60D Diesel Fuel Conditioner improves fuel performance and provides fuel system protection. Fuel injector pump bearings last longer as a result of better lubrication through the fuel system. It reduces gelling of diesel at arctic temperatures.

Color	Brown
Appearance	Liquid
Density, lb/gal @ 77°F (25°C)	6.98
Specific Gravity @ 77°F (25°C)	0.836
Flash Point, ASTM D-56	>130°F (54°C)
Auto Ignition Temperature	495°F (257°C)
Freezing Point	-144°F (-97°C)
Viscosity, #4 Ford Cup @ 77°F (25°C)	12 sec
Shelf Life (unopened container)	Two years

PM60G | GAS FUEL CONDITIONER

PM60G Gas Fuel Conditioner eliminates a variety of problems in the storage, transportation, and combustion of gasoline. When used continuously in gasoline, PM60G brings about more complete combustion. This helps reduce accumulations of harmful deposits in the firing chamber. Acids produced by the burning of gasoline in the engine are neutralized. PM60G prevents gums and varnishes from separating and leaving deposits.

Color	Red
Density, lb/gal @ 77°F (25°C)	6.70
Specific Gravity @ 77°F (25°C)	0.80
Initial Boiling Point	>300°F (>148°C)
Flash Point, ASTM D-56	105°F (40°C)
Auto Ignition Temperature	>500°F (>260°C)
Freezing Point	Not Determined
Viscosity, #4 Ford Cup @ 77°F (25°C)	9–10 sec

PM627 | PROTECTO PLATE with Liquid Moly

PM627 Protecto Plate is superior quality heavy duty grease with liquid moly. PM627 Protecto Plate plates the surface forming a non-melting film that prevents metal-to-metal contact and reduces operating temperatures. PM627 Protecto Plate has exceptional adhesive and cohesive properties, is non-melting, water resistant, and protects against corrosion as it lubricates.

Color	Red
Texture	Tacky
Active Component	Liquid Moly
Penetration, ASTM D-217 @ 77°F (25°C)	265–295
Viscosity Index of Oil	95
Specific Gravity, @ 77°F (25°C)	0.92
Density, lb/gal @ 77°F (25°C)	7.7
Dropping Point, ASTM D-2265	+500°F (260°C)
Flash Point, ASTM D-92	>450°F (232°C)
Water Washout Characteristics, ASTM D-1264 @ 100°F (37°C)	6.0%
NLGI Grade	2

PM700 | BOOM LUBE

Telescoping Boom Lubricant

PM700 Boom Lube, a totally new lubricant for telescoping booms, is engineered to extend the life of wear plates by three or four times. PM700 Boom Lube has extreme pressure properties, prevents rust and oxidation, is water resistant, and performs more like an oil than a grease.

	PM700N00	PM700N0	PM700N1	PM700N2
Color	Red	Red	Red	Red
Texture	Smooth Paste	Smooth Paste	Smooth Paste	Smooth Paste
Thickener	Non-Soap	Non-Soap	Non-Soap	Non-Soap
Penetration, ASTM D-217 @ 77°F (25°C)	415	375	325	285
NLGI Grade	00	0	1	2
Density, lb/gal @ 77°F (25°C)	7.45	7.47	7.52	7.55
Specific Gravity @ 77°F (25°C)	0.892	0.895	0.901	0.905
Flash Point, ASTM D-92	>400°F (>204°C)	>400°F (>204°C)	>400°F (>204°C)	>400°F (>204°C)
Dropping Point, ASTM D-2265	>540°F (>282°C)	>540°F (>282°C)	>540°F (>282°C)	>540°F (>282°C)
Base Oil Viscosity, SUS @ 100°F (37°C) SUS @ 210°F (98°C)	760 67.2	760 67.2	760 67.2	760 67.2
Shelf Life (unopened container)	Two Years	Two Years	Two Years	Two Years

PM800 | PREMIUM BEARING LUBRICANT

PM800 is a heavy-duty, high temperature, all-purpose lubricant. It is slightly tacky and has a high melting point of +500°F (260°C). PM800 is manufactured with slight adhesive and cohesive properties, allowing longer service intervals. PM800 forms a lubricating film that prevents metal-to-metal contact and reduces operating temperatures. It is water resistant and protects against corrosion as it lubricates.

Color	Red
Texture	Slightly Tacky
Thickener	Non-Soap
Density, lb/gal @ 77°F (25°C)	7.45
Specific Gravity, @ 77°F (25°C)	0.893
Dropping Point, ASTM D-2265	>500°F (260°C)
Flash Point, ASTM D-92	302°F (150°C) Based on Oil
Penetration, ASTM D-217 worked @ 77°F (25°C)	270
Base Oil Viscosity SUS @ 100°F (37°C) SUS @ 210°F (98°C)	750 64
Corrosion Preventive Properties, ASTM D-1743 @ 125°F (51°C)	Pass
Shelf Life (unopened container)	Two years

PM800M | PREMIUM LUBRICANT

With Moly

PM800M is a heavy-duty, all-purpose lubricant containing moly. It is tacky and has a high melting point of +500°F (+260°C). This premium lubricant allows longer service intervals. PM800M forms

a lubricating film that prevents metal-to-metal contact and reduces operating temperatures. It is waterproof and protects against corrosion as it lubricates.

	PM800MN0	PM800MN1	PM800MN2
Color	Gray	Gray	Gray
Texture	Slightly Tacky	Slightly Tacky	Slightly Tacky
Thickener	Non-Soap	Non-Soap	Non-Soap
Penetration, ASTM D-217 worked @ 77°F (25°C)	360–370	315–325	275–285
Density, lb/gal @ 77°F (25°C)	7.50	7.65	7.45
Specific Gravity @ 77°F (25°C)	0.899	0.917	0.892
Flash Point, ASTM D-92	>400°F (>204°C)	>400°F (>204°C)	>400°F (>204°C)
Dropping Point, ASTM D-2265	>500°F (>260°C)	>500°F (>260°C)	>500°F (>260°C)
Freezing Point	-4°F (-20°C)	-4°F (-20°C)	-0°F (-17°C)
Base Oil Viscosity, cSt @ 40°C	455	455	455
Shelf Life (unopened container)	Two Years	Two Years	Two Years

PM900 | SYNTHETIC MILITARY GREASE

PM900 Military Grease is a synthetic, low temperature grease and exceptional lubricant engineered for the most demanding industrial and commercial grease applications at extremely low temperatures. A film-forming lubricant PM900 Military Grease offers the ultimate in extreme pressure and wear protection. PM900 Military Grease services temperatures as low as -65°F (-53°C). It is highly water resistant and has the capability of improving lubrication at low arctic temperature conditions.

Color	Red
Texture	Smooth
Oil Synthetic	
Thickener	Inorganic
Density, lb/gal @ 77°F (25°C)	7.95
Specific Gravity, @ 77°F (25°C)	0.953
Flash Point, ASTM D-92	>450°F (>232°C)
Dropping Point, ASTM D-2265	>500°F (260°C)
Penetration, ASTM D-217	280
Base Oil Viscosity, cSt @ 100°C	4–5
Corrosion Preventive Properties, ASTM D-1743 @ 125°F (51°C)	Pass
Four Ball Wear, 1200 rpm @ 167°F (78°C), 1 hr, 40 Kg	0.60
Oxidation Stability, ASTM D-942 @ 210°F (98°C), 100 hrs, PSI Loss	5
Approximate Temperature Range	-65°F to >400°F (-53°C to >204°C)
Shelf Life (unopened container)	Two years

PM1400 | MILITARY GREASE

PM1400 MILITARY GREASE meets the most demanding industrial and commercial needs. PM1400 MILITARY GREASE is water resistant and reduces washout. It also resists pounding out under high shock load, and reduces wear on equipment. PM1400 MILITARY GREASE may reduce normal grease consumption up to 50%.

Appearance	Silver-Gray paste
Texture	Tacky
Thickener	Non-soap
Density, lb/gal @ 77°F (25°C)	7.76
Specific Gravity @ 77°F (25°C)	0.93
Dropping Point, ASTM D-2265	>500°F (>260°C)
Flash Point, ASTM D-92	435°F (223°C)
Penetration, ASTM D-217	
worked @ 77°F (25°C)	280
Oil Separation, ASTM D-1742 @ 77°F (25°C)	Nil
Evaporation Loss,	
ASTM D-972 @ 210°F (98°C)	Nil
Oxidation Stability, ASTM D-942	
@ 210LC (98°C), 72 hrs. psi loss	12
Shelf Life (unopened container)	Two years

PM1400L | MILITARY GREASE

Made with LIQUILON®*

PM1400L Military Grease, made with LIQUILON®*, meets the most demanding industrial and commercial needs. The presence of LIQUILON®* enhances the lubricity and provides a film forming lubricant. It is water resistant and reduces washout.

It also resists pounding out under high shock load, and reduces wear on equipment. PM1400L Military Grease may reduce normal grease consumption up to 50%.

	PM1400LN2	PM1400LN3	PM1400LN4
NLGI Grade	2	3	4
Color	Silver-Gray	Silver-Gray	Silver-Gray
Appearance	Paste	Paste	Paste
Texture	Tacky	Tacky	Tacky
Thickener	Non-Soap	Non-Soap	Non-Soap
Density, lb/gal @ 77°F (25°C)	7.50	7.75	8.00
Specific Gravity @ 77°F (25°C)	0.899	0.929	0.959
Penetration, ASTM D-217 @ 77°F (25°C)	270–285	235–245	180–200
Dropping Point, ASTM D-2265	>500°F (>260°C)	>500°F (>260°C)	>500°F (>260°C)
Flash Point, ASTM D-92	435°F (223°C)	435°F (223°C)	435°F (223°C)
Timken Load	45 lbs	45 lbs	45 lbs
Water Washout Characteristics, ASTM D-1264 @ 100°F (37°C)	2.6%	2.6%	2.6%
Evaporation Loss, ASTM D-972 @ 210°F (98°C)	Nil	Nil	Nil
Oxidation Stability, ASTM D-942 @ 210°F (98°), 72 hrs psi loss	12	12	12
4-Ball Weld Load, Kgf (ASTM-2596)	250 Pass 315 Weld	250 Pass 315 Weld	250 Pass 315 Weld
Temperature Range	20°F to >500°F -6°C to > 260°C	20°F to >500°F -6°C to > 260°C	20°F to >500°F -6°C to > 260°C
Shelf Life (unopened container)	Two Years	Two Years	Two Years

PM2400 | HIGH SHOCK LOAD LUBRICANT

PM2400 High Shock Load Lubricant meets most industrial and commercial needs. PM2400 High Shock Load Lubricant is a synthetic, water-resistant, all-season lubricant that will reduce washouts. It resists pounding out under high shock load and reduces wear on equipment. PM2400 High Shock Load Lubricant offers a solution to applications where a long lasting

synthetic lubricant with resistance to washout and weathering are in demand. This product may reduce normal synthetic grease consumption. The molybdenum disulfide continues to protect and lubricate even after the synthetic lubricant portion has literally been burned away.

	PM2400N00	PM2400N0	PM2400N1	PM2400N2
Color	Silver	Silver	Silver	Silver
Texture	Tacky	Tacky	Tacky	Tacky
Thickener	Non-Soap	Non-Soap	Non-Soap	Non-Soap
Water Resistance	Excellent	Excellent	Excellent	Excellent
Penetration, ASTM D-217 @ 77°F (25°C)	410–420	365–375	320–330	275–285
Density, lb/gal @ 77°F (25°C)	8.0	8.25	8.40	8.50
Specific Gravity	0.958	0.988	1.006	1.018
Flash Point, ASTM D-92	>500°F (>260°C)	>500°F (>260°C)	>500°F (>260°C)	>500°F (>260°C)
Dropping Point, ASTM D-2265	>550°F (>287°C)	>550°F (>287°C)	>550°F (>287°C)	>550°F (>287°C)
NLGI Grade	00	0	1	2
Approximate Temperature Range	-20°F to >500°F (-29°F to >260°C)	-20°F to >500°F (-29°F to >260°C)	-20°F to >500°F (-29°F to >260°C)	-20°F to >500°F (-29°F to >260°C)
Shelf Life (unopened container)	Two Years	Two Years	Two Years	Two Years

PM4000 | TRANSMISSION GUARD

Automatic Hydraulic Transmission Fluid

PM4000 Transmission Guard is a formulated using high quality oils and an additive package to meet the performance demands and extended drain intervals of modern automatic transmissions. Designed to provide complete protection to automatic transmission parts, PM4000 Transmission Guard offers excellent protection against corrosion, wear, and rust. It is oxidation resistant, and conditions oil seals. In addition, PM4000 Transmission Guard resists breakdown at high temperatures, thus reducing downtime for servicing. Its high viscosity index characteristics permit use of PM4000 Transmission Guard over a wide temperature range.

Color	Red
Odor	Mild
Density, lb/gal @ 77°F (25°C)	7.54
Specific Gravity	0.903
Flash Point, ASTM D-92	400°F (204°C)
Viscosity, @ 40°C cSt	40
Viscosity Index	190
Pour Point, ASTM D-97	-50°F (-45°C)

PM5000 | LEAK-FREE

Anti-Leak Hydraulic Oil Grades 32, 46, 68, 100,150

PM5000 Leak-Free is manufactured to give maximum fluid life and protection for heavy-duty operations. PM5000 Leak-Free keeps emulsion from occurring between water and oil. PM5000 Leak-Free has exceptional oxidation inhibitors and thermal stability, allowing service intervals up to 5000 hours. Operating temperatures may be reduced

by the film forming properties of PM5000 Leak-Free. Rubber seals and hoses are kept soft and pliable, allowing their normal operation. Varnish and carbon are greatly reduced and in many cases this eliminates leaking or blowby. PM5000 Leak-Free is available in several ISO grades such as 32, 46, 68, 100, and 150.

	PM5000/32	PM5000/46	PM5000/68	PM5000/100	PM5000/150
Color	Light Yellow	Light Yellow	Light Yellow	Light Yellow	Light Yellow
Appearance	Liquid	Liquid	Liquid	Liquid	Liquid
Odor	Mild Hydrocarbon	Mild Hydrocarbon	Mild Hydrocarbon	Mild Hydrocarbon	Mild Hydrocarbon
Density, lb/gal @ 77°F (25°C)	7.26	7.26	7.26	7.34	7.34
Specific Gravity, @ 77°F (25°C)	0.87	0.87	0.87	0.88	0.88
Boiling Point, ASTM D-2887	>500°F (260°C)	>500°F (260°C)	>500°F (260°C)	>500°F (260°C)	>500°F (260°C)
Gravity, @ 60°F (15°C)	26	26	25	28	26
Viscosity, ASTM D-445 cSt @ 40°C	32	46	68	100	150
Viscosity Index	101	101	101	101	101
Flash Point, ASTM D-92	>400°F (>204°C)	>400°F (>204°C)	>400°F (>204°C)	>400°F (>204°C)	>400°F (>204°C)
Fire Point, ASTM D-92	450°F (232°C)	495°F (257°C)	515°F (268°C)	525°F (273°C)	554°F (284°C)
Pour Point, ASTM D-92	0°F (-17°C)	0°F (-17°C)	0°F (-17°C)	0°F (-17°C)	0°F (-17°C)
Filterability	3M1/Cm2	3M1/Cm2	3M1/Cm2	3M1/Cm2	3M1/Cm2
Anti-foam List, ASTM D-892 1 st Sequence 2 nd Sequence	10/0 0/0	10/0 0/0	10/0 0/0	10/0 0/0	10/0 0/0
Oxidation Protection, ASTM D-943 Hours to 2.0 TAN (Total Acid Number)	3200	3200	3200	3200	3200
Copper Corrosion, ASTM D-130	1a	1a	1a	1a	1a
Steel Corrosion, ASTM D-665 A&B	Pass	Pass	Pass	Pass	Pass
Shelf Life (unopened container)	Two years	Two years	Two years	Two years	Two years

PM6000 | COMPRESSOR GUARD

Compressor Oil

PM6000 Compressor Guard has anti-wear properties and is available in 10, 20, 30 and 40 weights. PM6000 Compressor Guard is designed to meet the demands of reciprocal, rotary, and screw type compressors. It offers protection against rust, oxidation, moisture, and wear; it prevents buildups of carbon, gum, varnish, and sludge. It reduces oil consumption and is

one of the few compressor oils that exceeds normal interval performance. PM6000 Compressor Guard is non-foaming and has excellent demulsibility characteristics. PM6000 Compressor Guard maintains normal operating temperatures, which allows for reduced oxidation and longer service intervals.

	PM6000 10 wt	PM6000 20 wt	PM6000 30 wt	PM6000 40 wt
Color	Yellow	Yellow	Yellow	Yellow
Appearance	Liquid	Liquid	Liquid	Liquid
Density, lb/gal @ 77°F (25°C)	7.26	7.33	7.36	7.45
Specific Gravity @ 77°F (25°C)	0.87	0.88	0.88	0.89
Viscosity, cSt @ 100°C	4.1–<5.6	5.6–<9.3	9.3–12.5	12.5–<16.3
Evaporation Loss, ASTM D-972 @ 210°F (98°C)	0.35	0.35	0.35	0.35
Flash Point, ASTM D-92	475°F (246°C)	475°F (246°C)	475°F (246°C)	475°F (246°C)
Pour Point	10°F (-12°C)	10°F (-12°C)	10°F (-12°C)	10°F (-12°C)
Rust Preventive Test, ASTM D-3603 @ 140°F (60°C)	Pass	Pass	Pass	Pass
Shelf Life (unopened container)	Two Years	Two Years	Two Years	Two Years

PM7000 | COMPRESSOR GUARD

Semi-Synthetic Compressor Oil

PM7000 Compressor Guard is a semi-synthetic compressor oil that is available in 10, 20, 30 and 40 weights. The anti-wear additives of PM7000 Compressor Guard provide superior anti-wear characteristics for the compressors. As an excellent anti-wear oil, PM7000 Compressor Guard prevents metal-to-metal contact and extends the life of compressors. It maintains oxidation stability during extended operating hours and provides the best protection

against rust and moisture intrusion. PM7000 Compressor Guard prevents buildup of carbon deposits, varnish, and sludge. It is non-foaming and has excellent demulsibility characteristics. This high viscosity index semi-synthetic oil allows compressor operation over a wide temperature range while maintaining a uniform viscosity. Perfect for cold weather start-up, PM7000 Compressor Guard also allows for low temperature operation.

	PM7000 10 wt	PM7000 20 wt	PM7000 30 wt	PM7000 40 wt
Color	Light Yellow	Light Yellow	Light Yellow	Light Yellow
Odor	Mild Petroleum	Mild Petroleum	Mild Petroleum	Mild Petroleum
Density, lb/gal @ 77°F (25°C)	6.87	7.1	7.18	7.20
Specific Gravity @ 77°F (25°C)	0.823	0.838	0.860	0.862
Viscosity, cSt @ 40°C	32	46	100	150
cSt @ 100°C	4.1–<5.6	5.6–<9.6	9.6–12.5	12.5–<16.8
Viscosity Index	102	130	91.24	95.61
Evaporation Loss, ASTM D-972 @ 210°F (98°C)	0.33	0.35	0.38	0.39
Flash Point, ASTM D-92	>400°F (>204°C)	>400°F (>204°C)	>400°F (>204°C)	>400°F (>204°C)
Pour Point, ASTM D-92	-25°F (-31°C)	-22°F (-30°C)	-18°F (-27°C)	-15°F (-26°C)
Rust Preventive Test	Pass	Pass	Pass	Pass
Shelf Life (unopened container)	Two Years	Two Years	Two Years	Two Years

PM8000 | COMPRESSOR GUARD

Synthetic Compressor Oil

PM8000 Compressor Guard is a synthetic compressor oil formulated specifically for the demands of compressors. The exceptional additives of PM8000 Compressor Guard provide superior anti-wear characteristics to prevent metal-to-metal contact, which extends the life of compressors. PM8000 Compressor Guard maintains oxidation stability during extended operating hours. It offers the best protection against rust and

moisture intrusion. PM8000 Compressor Guard prevents buildup of carbon deposits, varnish, and sludge. It is non-foaming and has excellent demulsibility characteristics. This high viscosity index synthetic oil allows compressor operation over a wide temperature range while maintaining a uniform viscosity. Perfect for cold weather start-up, PM8000 Compressor Guard also allows for low temperature operation.

	PM8000/32 10 wt	PM8000/46 20 wt	PM8000/68 30 wt	PM8000/100 40 wt	PM8000/220 50 wt
Color	Clear Amber	Clear Amber	Clear Amber	Clear Amber	Clear Amber
Odor	Mild Petroleum	Mild Petroleum	Mild Petroleum	Mild Petroleum	Mild Petroleum
Density, lb/gal @ 77°F (25°C)	7.33	7.33	7.36	7.45	7.50
Specific Gravity @ 77°F (25°C)	0.88	0.88	0.88	0.89	0.90
Viscosity, cSt @ 100°C	4.1–<5.6	5.7–<9.3	9.4–12.5	12.6–<16.3	16.4–<21.9
Evaporation Rate, ASTM D-972 @ 210°F (98°C)	0.35	0.35	0.35	0.35	0.35
Flash Point, ASTM D-92	>450°F (>232°C)	>450°F (>232°C)	>450°F (>232°C)	>450°F (>232°C)	>450°F (>232°C)
Pour Point, ASTM D-92	-58°F (-50°C)	-49°F (-45°C)	-49°F (-45°C)	-45°F (-43°C)	-40°F (-40°C)
Rust Preventive Test	Pass	Pass	Pass	Pass	Pass
Shelf Life (unopened container)	Two Years	Two Years	Two Years	Two Years	Two Years



OIL CENTER RESEARCH INTERNATIONAL, LLC

info@oilcenter.com | 337.993.3559 | 800.549.2407

106 Montrose Avenue | Lafayette, LA 70503

WWW.OILCENTER.COM