



## OPTIMUS LITHIUM COMPLEX GREASE

### PRODUCT DESCRIPTION:

Optimus Lithium Complex are extended service lithium complex greases intended for a wide variety of applications and severe operating conditions. They are formulated to provide excellent high temperature performance with superb adhesion, structural stability and resistance to water contamination. These greases have a high level of chemical stability and offer excellent protection against rust and corrosion.

### APPLICATION:

- **Optimus Lithium Complex EP-00 and EP-0** are used in a wide range of equipment including industrial, automotive, construction and marine applications. Softer, high-temperature greases recommended for centralized grease application systems, gear lubrication, and where extreme-cold-temperature pumpability is important.
- **Optimus Lithium Complex EP-1** is recommended for use in industrial and marine applications, chassis components and farm equipment. It provides excellent low temperature performance.
- **Optimus Lithium Complex EP-2** is recommended for industrial and marine applications, chassis components and farm equipment. Its sticky formulation stays in applications longer.
- **Optimus Lithium Complex EP-2 Special** contains 0.75 molybdenum disulfide. It is recommended for industrial applications, chassis and farm equipment.
- **Optimus Lithium Complex EP-3** is recommended for applications where good high temperature and anti-leakage properties are required. Especially recommended for severe truck wheel bearing applications or for rolling element bearings subject to vibration, or where higher speeds require a grease with higher consistency to provide channeling characteristics.

### FEATURES & BENEFITS:

- Superb resistance to water washout and spray-off
- Highly adhesive and cohesive structure
- Excellent rust and corrosion resistance
- Very good resistance to thermal, oxidative and structural degradation at high temperature
- Very good anti-wear and EP performance
- Broad multi-purpose application

MEETS OR EXCEEDS THE REQUIREMENTS OF:	NLGI 00	NLGI 0	NLGI 1	NLGI 2	NLGI 3
DIN 51825: (2004-06)	-	-	KP1N-20	KP2N-20	-
Fives Cincinnati	-	P-79	P-72	P-64	-

### TYPICAL PROPERTIES:

TEST	OPTIMUS LITHIUM COMPLEX					
	NLGI 00	NLGI 0	NLGI 1	NLGI 2	NLGI 2 Special	NLGI 3
Thickener Type	Lithium Complex	Lithium Complex	Lithium Complex	Lithium Complex	Lithium Complex	Lithium Complex
Color, Visual	Dark blue	Dark blue	Dark blue	Dark blue	Grey-black	Dark blue
Copper Strip Corrosion, 24 h, 100 C, Rating, ASTM D4048	1B	1B	1B	1B	1B	1B
Corrosion Preventive Properties, Rating, ASTM D1743	Pass	Pass	Pass	Pass	Pass	Pass
Dropping Point, °C, ASTM D2265	N/A	260	275	290	290	290
Four-Ball Extreme Pressure Test, Load Wear Index, kgf, ASTM D2596	46.7	46.7	46.7	46.7	46.7	46.7
Four-Ball Extreme Pressure Test, Weld Point, kgf, ASTM D2596	315	315	315	315	400	315
Four-Ball Wear Test, Scar Diameter, mm, ASTM D2266	0.5	0.5	0.5	0.5	0.5	0.5



TEST	OPTIMS LITHIUM COMPLEX					
	NLGI 00	NLGI 0	NLGI 1	NLGI 2	NLGI 2 Special	NLGI 3
Molybdenum Disulfide Content, wt %, CALCULATED					0.75	
Oxidation Stability, Pressure Drop, 100 h, kPa, ASTM D942	35	35	35	35	35	35
Penetration, 60X, 0.1 mm, ASTM D217	420	375	330	285	285	240
Roll Stability, Penetration Consistency Change, 0.1 mm, ASTM D1831		0	0	0	0	0
SKF Emcor Rust Test, Distilled Water, ASTM D6138	0,0	0,0	0,0	0,0	0,0	0,0
Timken OK Load, lb, ASTM D2509	40	40	40	40	40	40
Viscosity @ 100 C, Base Oil, mm <sup>2</sup> /s, ASTM D445	18	18	18	18	18	18
Viscosity @ 40 C, Base Oil, mm <sup>2</sup> /s, ASTM D445	212	212	212	212	212	212
Viscosity Index, ASTM D2270	93	93	93	93	93	93
Water Sprayoff, Loss, %, ASTM D4049			15	10	10	10
Water Washout, Loss @ 79 C, wt%, ASTM D1264			8	5	5	5

**HEALTH & SAFETY, ENVIRONMENT:**

Prolonged and repeated contact with oil may cause skin disorders. Avoid contact. Wash immediately with soap and water. Do not discharge used oil in to drains or the environment. Dispose to an authorized used oil collection point. For further information on Safety Guidelines please refer to MSDS available on our website [www.lubrex.net](http://www.lubrex.net)

**HEALTH & SAFETY:**

This product is not likely to present any significant health or safety hazards when properly used in the recommended application and good standards of personal hygiene are maintained. Reference is made to the Safety Data Sheet (SDS) which is available on request via your local sales office or via the internet [www.lubrex.net](http://www.lubrex.net)

**PROTECT THE ENVIRONMENT:**

Take used oil to an authorized collection point. Comply with local regulation. Do not discharge into drains, soil or water.

**STORAGE:**

We recommend to store all packages under cover. In case outside storage is unavoidable, drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings. Products should never be stored above 60°C, exposed to hot sun or freezing conditions.

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