



# LUBEX EP

Irving Oil's premium grease was developed to meet the growing demand for higher quality multipurpose grease. Its complexed thickener gives a wide range of performance benefits over a variety of applications.

A grease can be considered as a suspension of oil in a matrix. The matrix can be formed in an oil by the reaction of an acid and a base, producing what is called a soap. A 'complex' grease is made when several different ingredients are used. Some greases use other means, such as clay or polymer gels to thicken the oil, and are called 'non-soap' greases. Greases offer some advantages over oils as lubricants. They are used where oils cannot be held in place, for example rolling bearings on a vertical shaft, or pin-bushings. The ability of a grease to act as a seal also simplifies bearing housing design. On the other hand, the presence of the thickener presents limitations to the use of any grease since this matrix can dissolve if water is present, or melt at high temperatures, or break down under mechanical stress.

Irving **LUBEX EP** is remarkable in its ability to overcome most of the traditional weaknesses of greases. It has excellent mechanical stability under repeated mechanical stress and shows little tendency to separate. It has good resistance to water, making it a good choice where water contamination is unavoidable. The grease is able to give top-level protection from extreme pressure (EP) load wear and damage, as well as protection from corrosion and rust. It has a very high dropping point and excellent resistance to oxidation, making **LUBEX EP** a good choice for high temperature (up to 200°C/392°F continuous) applications.

**LUBEX EP** is available in 4 standard NLGI\* grades. Grades are primarily used to indicate the pumpability of the grease. Grade 0 is suitable for winter conditions and instances when the grease has to be pumped through long supply lines or to the spray nozzles of a centralized lubrication system. Grade 1 should be used for hand application in winter-outdoor conditions. Grade 2 is used for all general indoor and summer-outdoor needs. Grade 3 is best suited for applications where the grease also acts as a seal, such as in bushings and sleeves, and in rolling bearings on vertical shafts.

\*NLGI : National Lubricating Grease Institute



## Typical Performance Results

NLGI GRADE	0	1	2	3
COLOUR	GREEN	GREEN	GREEN	GREEN
WORKED PENETRATION (D-217) @ 25°C, 60 strokes	364	334	290	248
10,000 strokes (% change)	4.67	4.19	4.48	9.68
100,000 strokes (% change)	9.62	5.99	7.59	16.94
SHELL ROLL STABILITY (D-1831) % change	3.86	3.29	3.44	6.91
VISCOSITY oil component (D-445) cSt @ 40°C	83.3	89.7	92.5	95.8
DROPPING POINT (°C) (D-2265)	236	254	262	291
TIMKEN LOAD (Kg) (D-2509)	25	25	25	25
4-BALL EP TEST (D-2596)				
LOAD WEAR INDEX	46	48	49	48
WELD POINT (Kg)	300	300	300	300
4-BALL WEAR TEST (D-2266) SCAR DIA. (mm)	0.45	0.45	0.45	0.45
OXIDATION RESISTANCE (D-942)				
PSI DROP, 100 Hours.	1	1	1	1
RUST PREVENTION (D-1743)	PASS	PASS	PASS	PASS
OIL SEPARATION (D-1742) % Mass loss	n.d.	2.22	0.91	0.62
OPERATING TEMP. RANGE (°C)	-35/185	-29/190	-29/200	-25/200
LOW TEMP. TORQUE (N.m) (D-4693) @ -40°C	8.4	8.62	8.93	9.5
GREASE MOBILITY – US STEEL @ -18°C, gr/min	4.5	3.75	3.6	3.1
HIGH TEMPERATURE BEARING LIFE (D-3527) Hours	n.d.	100	100	100

## Available Package Sizes

GREASE	400 G Case Tubes (140Z)	17Kg Pail (37.5 LB)	55Kg Keg (121.3 KG)	180Kg Drum (396.8 LB)
LUBEX-EP 0	X	X	X	X
LUBEX-EP 1	X	X	X	X
LUBEX-EP 2	X	X	X	X
LUBEX-EP 3	X			

Check with sales representative or website for the latest product approvals.

