

BioRail® LF HIGH PERFORMANCE RAIL LUBRICANT

BioRail® LF is first and foremost a high performance rail curve grease. It is also biodegradable.

In wayside systems BioRail® LF forms a vertical bead that is easily picked up. It carries through multiple curves and forms a coating on the gage face that is clearly visible for ease of inspection. In many cases the use of BioRail® LF will result in reduced grease consumption.

BioRail® LF empties evenly from the holding tank, without slumping down to form a "V". This minimizes pump cavitation. Unlike some vegetable based products, BioRail® LF will not gel over time. It remains pumpable and does not plug ports.

BioRail® LF has been extensively tested on Class 1 freight railroads in the United States, which represent the most severely loaded conditions anywhere in the world. Field experience has shown that the carry down, coating of the rail, and level of wear protection are equal to Whitmore's non-biodegradable rail curve greases.

BENEFITS:

- BioResponsible™ - BioRail® LF passes the Modified MITI (OECD 301C) test for ready biodegradability.
- WATER-RESISTANT - resists washing off the rail during heavy rainstorms.
- NOISE REDUCTION - especially valuable in urban areas to lower noise pollution.
- ADHESIVE AND COHESIVE - excellent track carry down, reducing the number of wayside lubricators.
- WIDE TEMPERATURE RANGE – in most climates the need for seasonal product grade changes is eliminated.

APPLICATIONS:

BioRail® LF NLGI 1 is suitable for use in wayside and vehicle-borne (Hi-Rail) lubrication systems. BioRail® LF NLGI 00 is suitable for spray systems.

ASTM #	Grade	TYPICAL CHARACTERISTICS		
		1	1.5	2
D-217	Penetration (Worked)	310-340	290-310	265-295
D-2265	Dropping Point, °F (°C)	365 (185)	395 (202)	398 (203)
D-445	Kinematic Viscosity (Base Oil)	cSt @ 40°C	51.34	52.44
		cSt @ 100°C	10.32	10.53
				52.68
D-2270	Viscosity Index (Base Oil)	195	196	197
Gardener Method	Density, lb/gal @ 60°F (15.5°C)	7.84	7.84	7.86
	Specific Gravity, g/cc @ 60°F (15.5°C)	0.9416	0.9416	0.9416
D-2596	Four Ball EP Weld Point, kg	400	400	400
D-2266	Four Ball Wear Wear Scar, mm	0.47	0.49	0.49
D-4049	Water Spray-Off, % Loss	41.0	38.5	35.6
D-1264	Water Washout, % Loss	3.20	3.99	3.99
FTM 321.2	Screen Bleed, %	4.2	2.2	2.1
	Thickener Type	Lithium	Lithium	Lithium
OEM Standard	Low Temperature Pumpability Lincoln Ventmeter @ 400 psi, °F (°C)	-10 (-23)	8 (-13)	25 (-4)

The above are average values. Minor variations which do not affect product performance are to be expected in normal manufacturing.

PACKAGING

Shuttle Tanks	Nonreturnable Totes	Drums	Kegs	Pails with liner bags
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For warranty information, scan the QR code.
You can also email us at sales@whitmores.com
Or write to the Sales Department at the address below.



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