



TECHNICAL DATA SHEET

RAILMASTER® LF HIGH PERFORMANCE RAIL GREASE WITH MoS₂

Railmaster® LF is a premium, high performance rail curve grease. Railmaster® LF has proven itself in the field as a cost saver to the Rail Industry by doing what rail curve grease is supposed to do. It coats the gage face and protects from wear.

Carry down: Railmaster® LF has been seen on the gage face as far as 8 miles from the wayside applicator.

Rain resistant: Railmaster® LF can be applied to a wet rail and will resist being removed by pounding rain.

Wide temperature range: There are several grades of Railmaster® LF. Each grade is capable of handling a wide temperature range. In many areas a single grade can be used year-round.

Slumps in the wayside reservoir: Railmaster® LF does not cause pump cavitation. Despite its robust consistency and adhesion to the rail, in the holding tank it moves cleanly down the walls with minimal vortex effect.

Stands at the wiping bar: Forms a vertical bead as it emerges from the port of the wiping bar. Doesn't spatter when hit by the wheel.

Easily visible: Close inspection is not necessary in order to see the coating on the gage face.

BENEFITS:

- **LOW TEMPERATURES** – excellent low temperature pumpability and adhesion for winter use.
- **WEAR PROTECTION** – extreme pressure and antiwear additive package extends rail and wheel life.
- **COHESIVE** – stands at the wiping bar and doesn't spatter.
- **LONG CARRY DOWN** – for protection that carries up to 8 miles.
- **WATER-RESISTANT** – protection during wet weather.
- **SOLID LUBRICANTS** – contains the wear-reducing solid lubricant molybdenum disulfide at levels that meet or exceed the specifications of major rail companies.

APPLICATIONS:

Railmaster® LF can be used in Hi-Rail and Wayside lubricators.

Railmaster® LF is available through a labor-saving, custom-tailored bulk lubricant system which we call Maintainer™.

ASTM #		TYPICAL CHARACTERISTICS					
	Grade	0-LT	0	1 LT	1	1.5	2
D-217	Cone Penetration (Worked)	385-415	355-385	310-340	310-340	290-320	265-295
D-2265	Dropping Point, °F (°C)	350 (177)	350 (177)	380 (194)	380 (194)	380 (194)	380 (194)
D-445	Kinematic Viscosity (Base Oil with Polymer)						
	cSt @ 40°C	31.00	209.50	290.50	290.50	249.00	1,119.70
	cSt @ 100°C	5.00	16.71	15.27	15.27	15.13	32.58
Gardner Method	Density, lb/gal @ 60°F (15.5°C)	7.60	7.73	7.68	7.68	7.68	7.70
	Specific Gravity, g/cc @ 60°F (15.5°C)	0.91	0.928	0.922	0.922	0.922	0.924
D-2509	Timken OK Load, lb	30	30	30	30	30	30
D-3704	Falex Ring and Block Test (Using Rail & Wheel Steel Test Specimens)						
	Wear Scar, mm @ 630 lb Load	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	1.583
	Metal Removed, mg @ 630 lb Load	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	4.800
	Coefficient of Friction @ 630 lb Load	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	0.250
D-2596	Four Ball EP, Weld Point, kg	315	315	315	315	315	315
D-2266	Four Ball Wear, Wear Scar, mm	0.50	0.50	0.50	0.50	0.50	0.50
D-4049	Water Spray-Off, % Loss (Rainstorm) 12 psi @ 77°F (25°C) @ 30 min.	NR	NR	<10	<10	8	<5
D-1743	Rust Test	Pass	Pass	Pass	Pass	Pass	Pass
D-4048	Copper Strip Corrosion for Greases 212°F (100°C) @ 3 hrs	1B	1B	1B	1B	1B	1B
	Thickener Type	Lithium	Lithium	Lithium	Lithium	Lithium	Lithium
	Ambient Usable Temperature Range, Wayside						
	°F	-40 to 15	-10 to 30	0 to 60	20 to 60	35 to 80	70 to 110
	°C	-40 to -9	-23 to -1	-18 to 16	-7 to 16	2 to 27	21 to 43

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

PACKAGING

Shuttle Tanks	Drums	Kegs	Pails
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THE WHITMORE MANUFACTURING COMPANY

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