



TECHNICAL DATA SHEET

RAILMASTER® LFG

HIGH PERFORMANCE RAIL GREASE WITH GRAPHITE

Railmaster® LFG gives maximum protection to rails and wheel flanges.

The coating that is deposited on the rail is tenacious, dense, and unaffected by rain. Several miles from the wayside applicator a substantial coating is clearly visible on the gage face and radius. Grease is often detectable on the gage face as far down as 8 miles (12 Km).

There are several grades of Railmaster® LFG. Each grade can be used over a wide temperature range. In many areas a single grade can be used year-round.

Railmaster® LFG does not cause pump cavitation. Rather than forming a vortex at the pump it moves down evenly in the holding tank.

Railmaster® LFG forms a vertical bead as it emerges from the port of the wiping bar. The grease doesn't spatter when hit by the wheel.

The coating of Railmaster® LFG on the gage face is dark and easily seen, making track inspection easy.

BENEFITS:

- **LOW TEMPERATURES** – excellent low temperature pumpability.
- **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 a high proportion of solid lubricants.

APPLICATIONS:

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

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

ASTM #	Grade	TYPICAL CHARACTERISTICS			
		0	1	1.5	2
D-217	Cone Penetration (Worked)	355-385	310-340	290-320	265-295
D-2265	Dropping Point, °F (°C)	350 (177)	380 (194)	380 (194)	380 (194)
D-445	Kinematic Viscosity (Base Oil with Polymer)				
	cSt @ 40°C	209.5	249.0	249.0	249.0
	cSt @ 100°C	16.71	15.13	15.13	15.13
D-2161	Saybolt Viscosity (Base Oil with Polymer)				
	SUS @ 100°F	1,115	1,350	1,350	1,350
	SUS @ 210°F	87	80.6	80.6	80.6
Gardner Method	Density, lb/gal @ 60°F (15.5°C)	7.73	7.68	7.68	7.70
	Specific Gravity, g/cc @ 60°F (15.5°C)	0.928	0.922	0.922	0.924
D-2509	Timken OK Load, lb	30	30	30	30
D-2596	Four Ball EP, Weld Point, kg	315	400	400	400
D-2266	Four Ball Wear, Scar Width, mm	0.45	0.45	0.45	0.45
D-4049 Modified	Water Spray-Off, % Loss (Rainstorm) 12 psi @ 77°F (25°C) @ 30 min.	NR	<10	8	<5
D-1743	Rust Test	Pass	Pass	Pass	Pass
D-4048 Modified	Copper Strip Corrosion for Greases 212°F (100°C) @ 3 hrs	1B	1B	1B	1B
	Ambient Usable Temperature Range, Wayside °F (°C)	-3 (-19) to 50 (10)	10 (-12) to 90 (32)	35 (2) to 110 (43)	50 (10) to 130 (54)
	Thickener Type	Lithium	Lithium	Lithium	Lithium

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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Distributed By:



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WHITMORE'S

MATERIAL SAFETY DATA SHEET

I. IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY					
Product Name:	Railmaster® LFG <i>(All Grades)</i>	Manufacturer/Supplier: The Whitmore Manufacturing Company 930 Whitmore Drive Rockwall, Texas 75087, U.S.A.			
Chemical Family:	Petroleum Hydrocarbon				
Use:	Rail Lubricant				
Emergency Tel. No.:	CHEMTREC	U.S.A. & Canada 800-424-9300 (24 hrs)	International 703-527-3887 (Collect - 24 hr)	Australia 00-111-703-527-3887 (Collect - 24 hr)	
II. COMPOSITION INFORMATION ON INGREDIENTS					
<u>Hazardous Components</u>	<u>CAS No.</u>	<u>Wt%</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>Other Limits of Exposure</u>
None					
III. ADVERSE HUMAN HEALTH EFFECTS					
Eyes:	Any eye contact will cause irritation.				
Skin:	Prolonged skin contact will cause irritation.				
Inhalation:	Breathing fumes in confined areas at elevated temperatures will cause lung irritation.				
Ingestion:	Harmful if swallowed.				
IV. FIRST AID MEASURES					
Eyes:	Flush with large amounts of cold water. If irritation persists, SEEK MEDICAL ATTENTION.				
Skin:	Thoroughly wash exposed area with soap and water.				
Inhalation:	Provide fresh air source. If irritation persists, SEEK MEDICAL ATTENTION.				
Ingestion:	Do not induce vomiting. SEEK MEDICAL ATTENTION.				
V. FIRE FIGHTING MEASURES					
Extinguishing Media:	Foam, CO ₂ , Dry Chemical				
Unsuitable Extinguishing Media:	Not Known				
Fire Fighting Protective Equipment:	Treat as an oil fire.				
VI. ACCIDENTAL RELEASE MEASURES					
Personal Precautions:	Wear plastic or neoprene rubber gloves.				
Environmental Precautions:	Do not allow it to enter drains.				
Spillage:	Absorb with dry inert material and shovel up.				
VII. HANDLING AND STORAGE					
Handling:	Keep away from open flame and sparks.				
Storage:	Store in metal containers until disposal.				
VIII. EXPOSURE CONTROL/PERSONAL PROTECTION					
Respiratory Protection:	If product is overheated, use organic NIOSH/MSHA filter-type respirator.				
Hand Protection:	Plastic or Neoprene Rubber				
Eye Protection:	Safety Goggles.				
Body Protection:	None				

HMS SYMBOLS

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	1
Reactivity	0
PPI	B

MSDS-430

Effective Date: 6-8-04

Revised Date: 9-30-09

IX. PHYSICAL AND CHEMICAL PROPERTIES							
Physical State:	Tacky Grease	Color:	Dark Gray	Odor:	Petroleum		
Boiling Range/point, °F (°C):	N/A	Melting Point, °F (°C):	>380 (>193)				
Flash Point (COC), °F (°C):	[>400 (>204) (Base Oils)]	Autoignition Temperature, °F (°C):	Not Known				
Explosive Properties:	LEL: N/A	UEL: N/A	Evaporation Rate (Butyl Acetate):	N/A			
Partition Coefficient (Log Pow):	N/A		Vapor Pressure (kPa):	Nil			
Density:	7.60 - 7.75	Flammability:	Not Known				
Oxidizing Properties:	Nil	Solubilities in Water:	Nil	Vapor Density:	N/A	% Volatiles:	N/A
X. STABILITY AND REACTIVITY							
Stability:	Chemically stable under normal conditions.						
Conditions to Avoid:	Direct flame.						
Materials to Avoid:	Strong inorganic and organic acids and oxidizing agents.						
Decomposition Products:	Oxides of carbon, sulfur, phosphorus, & hydrocarbon.						
XI. TOXICOLOGICAL INFORMATION							
Acute Toxicity:	Not Known		Skin Irritancy:	Very Mild			
Chronic Toxicity:	Not Known		Skin Sensitization:	Not Known			
Sub-acute/Subchronic Toxicity:	Not Known		Genotoxicity:	Not Known			
California Prop 65:	Not Available		EC Classification (67/548/EEC):	No			
Carcinogenicity:	NTP: No	IARC: No	OSHA:	No			
LC-50:	Not Available		LD-50:	Not Available			
XII. ECOLOGICAL INFORMATION							
Possible Effects:	Unknown						
Behavior:	Relatively well behaved. Bioaccumulation potential nil.						
Environmental Fate:	Not thought to be toxic to marine or land organisms.						
XIII. WASTE DISPOSAL							
Product Disposal:	Observe all local, state & federal regulations concerning disposal of lubricating grease.						
Container Disposal:	Observe all local, state & federal regulations concerning disposal of lubricating grease.						
XIV. TRANSPORT INFORMATION							
DOT:	Not Regulated		UN No.:	Not Regulated			
Air Transport (ICAO/IATA):	Not Regulated						
Sea Transport (IMO/IMDG):	Not Regulated						
Road and Rail Transport (ADR/RID):	Not Regulated						
XV. REGULATORY INFORMATION							
Labeling Information:	N/A		EC Annex 1 Classification:	N/A			
R Phrases:	N/A						
S Phrases:	S2 Keep away from children.						
Ozone Depleting Chemicals:	None/Nil		TSCA:	All Components are listed.			
WHMIS (Canada):	Not Regulated						
EPA Regulation 40 CFR Part 372 (SARA Section 313):	None						
XVI. OTHER INFORMATION							
None							

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