



## **BIOBASED RAILROAD LUBRICANTS**

*Safe for your railroad - Safe for the environment*

While others promote “environmentally-friendly” friction modifiers using synthetic or water-based products, Railmark’s Top-of-Rail Friction Modifier is “environmentally-safe” while providing greater performance. Derived from USA-grown crop oils, Railmark’s Top-of-Rail Friction Modifier has a naturally higher Viscosity Index creating a more temperature stable product, as well as, offering a naturally higher thin film strength. Vegetable oil molecules, due to their polarity, bond and adhere better to metal surfaces than mineral oils requiring less chemical additives. The result is that Railmark’s Top-of-Rail Friction Modifier withstands pressure better and is less likely to thin out at higher temperatures. Railmark’s biobased lubricants meets the U.S. Environmental Protection Agency’s (EPA) “Environmental Preferable Purchasing (EPP)” criteria, is a U.S. Department of Agriculture (USDA) “BioPreferred™” product and is “Biobased Labeled”.

### **Railmark’s Top-of-Rail Friction Modifiers reduces wheel / rail friction which:**

- **Extends the life of rail (railhead)**
- **Extends the life of the equipment (wheel tread)**
- **Increases fuel efficiency**
- **Reduces harmful effects of lateral forces**
- **Decreases derailment potential**
- **Reduces noise**
- **Increases rail grinding intervals**
- **Safer for the environment and safer for your employees**
- **No harsh orders, no heavy metals**

**Much has been written and documented about the financial and operational benefits of friction reduction in railroad operations. Railmark’s Biobased Top-of-Rail Friction Modifiers simply performs better, more cost efficient and is safer for the environment and your railroad’s employees. Let Railmark show you how we provide,**

**“A New Train of Thought...®”**



A NEW TRAIN OF THOUGHT...®

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### RAILMARK TOP OF RAIL FRICTION MODIFIERS

#### Side By Side Comparisons

	RAILMARK TOP-OF-RAIL	WATER BASED ToR	PETROLEUM BASED ToR
Product Base	USA-Grown Crop Oils	Water	Petroleum
Available Sizes	19L/5 Gal Pail 55 Gal Drums 275 Gal Totes	19L/5 Gal Pail	19L/5 Gal Pail 55 Gal Drums 275 Gal Totes
Fire Safety	Non-Flammable	Non-Flammable	Flammable
Odor	None	None	Yes
Freezing Point (°C)	-25	-6	-25
Viscosity, cP @ 25°C	900-1000	825 - 1100	600-700
Meets EPA's "EPP"	YES	NO	NO
USDA "BioPreferred™"	YES	NO	NO
Biobased Labeled	YES	NO	NO

#### RAILMARK BIOBASED TOP-OF-RAIL FRICTION MODIFIERS

- #12090 – Liquid Friction Modifier, 18.9L / 5 U.S. Gallon Pails
- #12091 – Liquid Friction Modifier, 208.2L / 55 U.S. Gallon Drums
- #12092 – Liquid Friction Modifier, 1,041L / 275 U.S. Gallon Totes

SOLD EXCLUSIVELY TO THE RAILROAD INDUSTRY THRU:

**Railmark Track Works Inc.**

*A Railmark Company*

[www.railmark.com](http://www.railmark.com)

[customerservice@railmark.com](mailto:customerservice@railmark.com)