



SAFETY DATA SHEET – BIOBASED TOP OF RAIL COMPOUND

1. IDENTIFICATION OF PRODUCT

Product Name: ECORail™ Biobased Top of Rail Compound (ToRC)

Part Numbers: #12090 (5-Gallon Pail); #12091 (55-Gallon Drum) and #12092 (275-Gallon Plastic Tote)

Use of the Substance: Shortened Product name: Top of Rail Compound (ToRC)

CAS No. Mixture

Supplier: Railmark Track Works Inc.
1045 4th Street – Henderson, KY 42420

SDS Questions: (812) 454-2350

Emergency telephone: CHEMTREC: (800) 824-9300

2. HAZARDS IDENTIFICATION

This preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Physical hazards Not classified as a physical hazard.

Health hazards Not Classified as a health hazard.

Environmental hazards Not classified as an environmental hazard.

Specific hazards May form vapors or oil mists during mechanical action or at elevated temperatures which may be irritating to the respiratory tract. Excessive inhalation of oil mist may affect respiratory system. Dermatitis after prolonged exposure. Prolonged or repeated contact with skin may cause redness, itching, irritation, eczema/chapping and oil acne.

Main symptoms Irritant effects. Irritation of eyes and mucous membranes.

Label Elements Label in accordance with (EC) no. 1272/2008 No pictogram required

Other Hazards Not classified as PBT/vPvB by current EU criteria.

3. COMPOSITION & INFORMATION ON INGREDIENTS

Chemical Name	CAS #	% Weight
Vegetable Oil	68956-68-3	[1-10%]
Proprietary Gelation Mixture	-	[40-60%]
Fume Silica	68611-44-9	[1-2%]
Ethyl Alcohol (SDA) 40-B, 200	64-17-5	[4-10%]
Molygraph	7782-42/1317-33-5	[10-20%]
Purified Water	7789-20-0	(20-30%)
Glycerol and emulsifier	56-81-5	(2-4%)
TOTAL INGREDIENTSs		100%

Composition comments The full text for all R-phrases is displayed in Section 16. All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. FIRST-AID MEASURES

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact Remove contaminated clothes and rinse skin thoroughly with water for at least 15 minutes. In case of rashes, wounds, or other skin disorders: Seek medical attention and bring along these instructions.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if irritation develops or persists.

Ingestion Drink 1 or 2 glasses of water. Get medical attention if any discomfort continues.
Most important symptoms and
Effects Symptoms include itching, burning, redness, and tearing of eyes.

General advice Get medical attention if any discomfort develops.

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Dry chemical, foam, carbon dioxide.

Extinguishing media which must not be used for safety reasons None known.

Unusual fire & explosion hazards None known.

Specific hazards Thermal decomposition may produce smoke, oxides of carbon and lower molecular weight organic compounds whose composition have not been characterized.

Special protective equipment for fire-fighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

Fire fighting equipment/instructions Move containers from fire area if you can do it without risk. Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions When working with heated grease, mechanical ventilation may be required. Remove sources of ignition. Avoid contact with skin and eyes. For personal protection, see Section 8. In case of spills, beware of slippery floors and surfaces.

Environmental precautions	Do not allow to enter drains, sewers, or watercourses. Collect and dispose of spillage as indicated in Section 13. Contact local authorities in case of spillage to drain/aquatic environment.
Methods for cleaning up	<p>Stop the flow of material if this is without risk. Dike the spilled material, where this is possible.</p> <p>Small Spills: Absorb spillage with oil-absorbing material.</p> <p>Large Spills: Absorb spilled substance with sand or earth.</p>

7. HANDLING AND STORAGE

Handling	Handle and open container with care. Wear appropriate personal protective equipment. Avoid prolonged and repeated contact with grease, particularly used grease. Always remove grease with soap and water or skin cleaning agent, never use organic solvents. Use work methods which minimize production of vapors and mists. Observe good industrial hygiene practices.
Storage	Keep away from heat, sparks, and open flame. Store in a cool and well-ventilated place. Store away from incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits	No exposure limits noted for ingredient(s).
Exposure controls	Provide adequate ventilation. When working with heated oil, mechanical ventilation may be required. Provide access to washing facilities including soap, skin cleanser and fatty cream.
Respiratory protection	In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter (type P2). Seek advice from local supervisor.
Hand protection	Wear protective gloves. Nitrile gloves are recommended. Suitable gloves can be recommended by the glove supplier.
Eye protection	If risk of splashing, wear safety goggles or face shield.
Skin and body protection	Wear suitable protective clothing. Frequent change of gloves is advisable.
General	Use personal protective equipment as required. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Environmental exposure Controls	Contain spills and prevent releases and observe national regulations on emissions.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practices. Wash hands after handling. Launder contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid to semi-solid
Physical state	Slurry Liquid
Color	Gray to Black
Odor	Characteristic Glycerol and alcohol
Odor threshold	Not available
pH	Neutral
Boiling point	Not available
Flash point	NA
Flammability	Not available
Flammability limits in air, upper, % by volume	Not available
Flammability limits in air, lower, % by volume	Not available
Vapor pressure	< 0.5 mm Hg at 20 °C
Relative density	0.98
Solubility (water)	Practically insoluble
Partition coefficient (n-octanol/water)	Not available
Viscosity	Not available
Vapor density	> 1 (Air = 1)
Evaporation rate	< 1 (n-Butylacetate = 1)
Melting point	Not available
Freezing point	Not available
Auto-ignition temperature	Not available
VOC	0 %

10. STABILITY AND REACTIVITY

Stability	Stable at normal conditions.
Conditions to avoid	High temperatures, exposure to light and contact with incompatible materials.
Materials to avoid	Strong oxidizing agents.



Hazardous decomposition Products	At thermal decomposition temperatures, carbon monoxide and carbon dioxide. Nitrogen oxides.
Hazardous polymerization	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	May form vapors or oil mists during mechanical action or at elevated temperatures which may be irritating to the respiratory tract. Excessive inhalation of oil mist may affect respiratory system. Causes skin and eye irritation. Swallowing may cause gastrointestinal irritation.
Routes of exposure	Eye contact. Inhalation. Skin contact.
Chronic toxicity	Degreasing. Prolonged or frequent contact may cause redness, itching and eczema/chaps.
Sensitization	The product contains a small amount of sensitizing substance which may provoke an allergic reaction among sensitive individuals.
Carcinogenicity	No carcinogenicity data available for this product.
Mutagenicity	No test data available for the product.
Reproductive Toxicity	No test data available for the product.
Epidemiology	No epidemiological data is available for this product.
Local effects	Irritating to eyes and skin. May cause redness and pain.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Biobased materials are generally non-hazardous to the environment.
Mobility surface.	The product has immiscible substances with water and will spread on the water surface.
Persistence and degradability	Biodegradable
Bioaccumulation	Non-bioaccumulative
Aquatic toxicity	Non-Toxic

13. DISPOSAL CONSIDERATIONS

Disposal instructions	Dispose in accordance with all applicable regulations.
Waste from residues / unused Products	Dispose of in accordance with local regulations.
EU wastecodes	20 01 26*



14. TRANSPORT INFORMATION

ADR	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.

15. REGULATORY INFORMATION

Other regulations	This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006 as amended.
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16. OTHER INFORMATION

Wording of the R-phrases in sections 2 and 3	R65 Harmful: may cause lung damage if swallowed.
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Country(s) or region inventory (yes/no)*	Inventory name	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
	Europe European List of Notified Chemical Substances (ELINCS)	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

Disclaimer	The information given is based on data available for the material, the components of the material, and similar materials.
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Issued by	Dr. Lou A. Honary
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