

**SECTION 1: Identification**

**1.1. Identification**

Product form : Mixture  
Product name : RailX™

**1.2. Recommended use and restrictions on use**

No additional information available

**1.3. Supplier**

BioChem Systems, Inc.  
480 Wildwood Forest Drive  
Suite 400  
Spring, TX 77380  
1 (800) 777-7870

**1.4. Emergency telephone number**

Emergency number : PERS - (800) 633-8253

**SECTION 2: Hazard(s) identification**

**2.1. Classification of the substance or mixture**

**GHS US classification**

Flam. Liq. 4 H227  
Asp. Tox. 1 H304

**2.2. GHS Label elements, including precautionary statements**

**GHS US labeling**

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger  
Hazard statements (GHS US) : H227 - Combustible liquid  
H304 - May be fatal if swallowed and enters airways  
Precautionary statements (GHS US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P280 - Wear eye protection, face protection, protective clothing, protective gloves.  
P301+P310 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER  
P331 - Do NOT induce vomiting.  
P370+P378 - In case of fire: Use Carbon dioxide (CO2), Foam, dry chemical, dry extinguishing powder to extinguish.  
P403+P235 - Store in a well-ventilated place. Keep cool.  
P405 - Store locked up.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**2.3. Other hazards which do not result in classification**

No additional information available

**2.4. Unknown acute toxicity (GHS US)**

Not applicable

**SECTION 3: Composition/Information on ingredients**

**3.1. Substances**

Not applicable

**3.2. Mixtures**

Name	Product identifier	%
Naphtha, petroleum, hydrotreated heavy	(CAS-No.) 64742-48-9	45 – 70
Dipropylene glycol monomethyl ether	(CAS-No.) 34590-94-8	15 – 40

\*In accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200), the specific chemical identity or exact weight % has been withheld as a trade secret.

**SECTION 4: First-aid measures**

**4.1. Description of first aid measures**

First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.  
First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention. If breathing is difficult, supply oxygen. If breathing has stopped, give artificial respiration.  
First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. Get medical attention immediately.  
First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Get medical attention immediately. Continue rinsing.  
First-aid measures after ingestion : IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention immediately.

**4.2. Most important symptoms and effects (acute and delayed)**

Symptoms/effects : May be fatal if swallowed and enters airways.  
Symptoms/effects after inhalation : May be fatal if swallowed and enters airways.  
Symptoms/effects after skin contact : May cause skin irritation.  
Symptoms/effects after eye contact : Direct contact with the eyes is likely to be irritating.  
Symptoms/effects after ingestion : May be fatal if swallowed and enters airways.

**4.3. Immediate medical attention and special treatment, if necessary**

No additional information available

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**SECTION 5: Fire-fighting measures**

**5.1. Suitable (and unsuitable) extinguishing media**

Suitable extinguishing media : Carbon dioxide. Foam. Dry powder. Sand.

**5.2. Specific hazards arising from the chemical**

Fire hazard : Combustible liquid and vapor.  
 Explosion hazard : Product is not explosive.  
 Reactivity : No dangerous reactions known under normal conditions of use.

**5.3. Special protective equipment and precautions for fire-fighters**

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment. Prevent human exposure to fire, fumes, smoke and products of combustion.  
 Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection. Use special care to avoid static electric charges. Avoid breathing fumes or vapors. No flames, no sparks. Eliminate all sources of ignition.

**6.1.1. For non-emergency personnel**

Protective equipment : Wear protective equipment as described in section 8.  
 Emergency procedures : Evacuate unnecessary personnel.

**6.1.2. For emergency responders**

Protective equipment : Approved supplied-air respirator, in case of emergency. Wear suitable protective clothing, gloves and eye or face protection.

**6.2. Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

For containment : Sweep or shovel spills into appropriate container for disposal. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.  
 Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Wash spill area thoroughly with plenty of soap and water. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). Notify authorities if product enters sewers or public waters.

**6.4. Reference to other sections**

No additional information available

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Provide good ventilation in process area to prevent formation of vapor. Do not breathe vapors, mist. Keep container tightly closed in a cool place. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

**7.2. Conditions for safe storage, including any incompatibilities**

Storage conditions : Store in dry, cool, well-ventilated area. Keep cool. Protect from sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 Incompatible materials : Strong oxidizing agents. Strong acids.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

<b>Dipropylene glycol monomethyl ether (34590-94-8)</b>		
ACGIH	ACGIH OEL TWA [ppm]	100 ppm
ACGIH	ACGIH OEL STEL [ppm]	150 ppm
ACGIH	Remark (ACGIH)	TLV® Basis: Liver & CNS eff
ACGIH	Regulatory reference	ACGIH 2022
OSHA	OSHA PEL (TWA) [1]	600 mg/m³
OSHA	OSHA PEL (TWA) [2]	100 ppm
OSHA	OSHA PEL (STEL) [1]	900 mg/m³ Vacated
OSHA	OSHA PEL (STEL) [2]	150 ppm Vacated
OSHA	Limit value category (OSHA)	prevent or reduce skin absorption
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
IDLH	IDLH [ppm]	600 ppm
NIOSH	NIOSH REL (TWA)	600 mg/m³
NIOSH	NIOSH REL TWA [ppm]	100 ppm
NIOSH	NIOSH REL (STEL)	900 mg/m³
NIOSH	NIOSH REL STEL [ppm]	150 ppm
NIOSH	US-NIOSH chemical category	Potential for dermal absorption
<b>Naphtha, petroleum, hydrotreated heavy (64742-48-9)</b>		
ACGIH	Remark (ACGIH)	OELs not established
OSHA	Remark (OSHA)	OELs not established

**8.2. Appropriate engineering controls**

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

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### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment symbol(s):



#### Personal protective equipment:

Gloves. Protective goggles. Protective clothing.

In case of inadequate ventilation, wear respiratory protection.

#### Hand protection:

Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified and selected according to regional or national standards. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate PVC, or vinyl. Suitable gloves should be recommended by the glove supplier.

#### Eye protection:

Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles.

#### Skin and body protection:

Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

#### Respiratory protection:

Wear a NIOSH-approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions. In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment with gas filter (type A2). Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colorless to slight yellow
Odor	: Solvent
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 360 °F (182 °C)
Flash point	: 145 °F Tag (62.7 °C)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: < 1 mm Hg @ 20 °C
Relative vapor density at 20 °C	: No data available
Relative density	: 0.84
Solubility	: Negligible.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: < 20 cSt
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

### 10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

### 10.3. Possibility of hazardous reactions

No data available.

### 10.4. Conditions to avoid

No flames, no sparks. Eliminate all sources of ignition. Elevated temperature. Prevent vapor accumulation.

### 10.5. Incompatible materials

Acids. Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO2). Toxic fumes.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

### Dipropylene glycol monomethyl ether (34590-94-8)

LD50 oral rat	5230 mg/kg
LD50 dermal rat	> 19020 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	9500 mg/kg
LC50 Inhalation - Rat	> 3000 mg/m³ Source: ECHA

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Naphtha, petroleum, hydrotreated heavy (64742-48-9)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 3160 mg/kg
LC50 Inhalation - Rat	> 8500 mg/m <sup>3</sup> (Exposure time: 4 h)

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Viscosity, kinematic	: < 20 cSt
Symptoms/effects	: May be fatal if swallowed and enters airways.
Symptoms/effects after inhalation	: May be fatal if swallowed and enters airways.
Symptoms/effects after skin contact	: May cause skin irritation.
Symptoms/effects after eye contact	: Direct contact with the eyes is likely to be irritating.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways.

### SECTION 12: Ecological information

<b>12.1. Toxicity</b>	
Ecology - general	: No information available.
<b>12.2. Persistence and degradability</b>	
No information available.	
<b>12.3. Bioaccumulative potential</b>	
No information available.	
<b>12.4. Mobility in soil</b>	
No additional information available	
<b>12.5. Other adverse effects</b>	
No additional information available	

### SECTION 13: Disposal considerations

<b>13.1. Disposal methods</b>	
Waste treatment methods	: Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

### SECTION 14: Transport information

<b>Department of Transportation (DOT)</b>	
Not Regulated	: This material has been determined to be 'NOT COMBUSTIBLE' according to 49 CFR 173.120; it does not sustain combustion by ASTM D4206.
<b>Transport by sea (IMDG)</b>	
Not regulated	
<b>Air transport (IATA)</b>	
Not regulated	

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

RailX™	
All chemical substances in this product are listed as "Active" in the EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active-Inactive) Requirements Rule" ("the Final Rule") of Feb 2019, as amended Feb 2021 or are otherwise exempt, or regulated by other agencies such as FDA or FIFRA	
SARA Section 311/312 Hazard Classes	Health hazard - Aspiration hazard Physical hazard - Flammable (gases, aerosols, liquids, or solids)

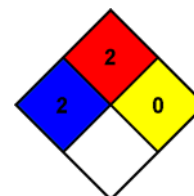
**15.2. International regulations**  
No additional information available

#### 15.3. US State regulations

Component	State or local regulations
Dipropylene glycol monomethyl ether (34590-94-8)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

### SECTION 16: Other information

Other information	: Revised by: Regulatory & Compliance. : Revision 10/16/2023
NFPA health hazard	: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard	: 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.



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HMIS Hazard Rating

Health	:	2
Flammability	:	2
Physical	:	0

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*