

### SECTION 1: Identification

#### 1.1. Product identifier

Product form : Mixture  
Trade name : RailX™  
Product group : Trade product

#### 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 identification

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

##### Classification (GHS CA)

Flammable liquids, Category 4 H227 Combustible liquid  
Aspiration hazard, Category 1 H304 May be fatal if swallowed and enters airways

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

##### GHS CA labeling

Hazard pictograms (GHS CA) :



Signal word (GHS CA) : Danger

Hazard statements (GHS CA) : H227 - Combustible liquid  
H304 - May be fatal if swallowed and enters airways

Precautionary statements (GHS CA) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P280 - Wear protective gloves, protective clothing, chemical goggles, & face protection.  
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
P331 - Do NOT induce vomiting.  
P370+P378 - In case of fire: Use media other than water to extinguish.  
P403 - Store in a well-ventilated place.  
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

No additional information available

#### 2.4. Unknown acute toxicity (GHS CA)

No data available

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

| Name                                   | Chemical name / Synonyms | Product identifier  | %       |
|--|--------------------------|---------------------|---------|
| Naphtha, petroleum, hydrotreated heavy | -                        | CAS-No.: 64742-48-9 | 45 – 70 |
| Dipropylene glycol monomethyl ether    | -                        | CAS-No.: 34590-94-8 | 15 – 40 |

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

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.

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|                                       |   |
|---------------------------------------|---|
| 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.                                      |
| 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. |

### 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

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

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

### 5.2. Unsuitable extinguishing media

No additional information available

### 5.3. Specific hazards arising from the hazardous product

|                  |                                  |
|------------------|----------------------------------|
| Fire hazard      | : Combustible liquid and vapour. |
| Explosion hazard | : Product is not explosive.      |

### 5.4. 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 vapours. No flames, no sparks. Eliminate all sources of ignition. |
|------------------|--|

### 6.2. Methods and materials 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. |

### 6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

## 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 vapour. Do not breathe vapours, 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**

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

**Canada (Alberta) - Occupational Exposure Limits**

|                       |   |
|-----------------------|---|
| Local name            | (2-Methoxymethylethoxy) propanol (Dipropylene glycol methyl ether, DPGME) |
| OEL TWA               | 606 mg/m <sup>3</sup>   |
| OEL TWA [ppm]         | 100 ppm   |
| OEL STEL              | 909 mg/m <sup>3</sup>   |
| OEL STEL [ppm]        | 150 ppm   |
| Notations and remarks | Substance may be readily absorbed through intact skin.                    |
| Regulatory reference  | Alberta Regulation 191/2021   |

**Canada (Quebec) - Occupational Exposure Limits**

|                       |                       |
|-----------------------|-----------------------|
| VECD (OEL STEL)       | 909 mg/m <sup>3</sup> |
| VECD (OEL STEL) [ppm] | 150 ppm               |
| VEMP (OEL TWA)        | 606 mg/m <sup>3</sup> |
| VEMP (OEL TWA) [ppm]  | 100 ppm               |

**Canada (British Columbia) - Occupational Exposure Limits**

|                       |  |
|-----------------------|--|
| Local name            | Dipropylene glycol methyl ether [bis-(2-Methoxypropyl) ether (DPGME)]      |
| OEL TWA [ppm]         | 100 ppm  |
| OEL STEL [ppm]        | 150 ppm  |
| Notations and remarks | Skin   |
| Regulatory reference  | OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC) |

**Canada (Manitoba) - Occupational Exposure Limits**

|                       |   |
|-----------------------|---|
| Local name            | Dipropylene glycol methyl ether (DPGME) |
| OEL TWA [ppm]         | 100 ppm                                 |
| OEL STEL [ppm]        | 150 ppm                                 |
| Notations and remarks | TLV® Basis: Liver & CNS eff             |
| Regulatory reference  | ACGIH 2022                              |

**Canada (New Brunswick) - Occupational Exposure Limits**

|                |                       |
|----------------|-----------------------|
| OEL TWA        | 606 mg/m <sup>3</sup> |
| OEL TWA [ppm]  | 100 ppm               |
| OEL STEL       | 909 mg/m <sup>3</sup> |
| OEL STEL [ppm] | 150 ppm               |

**Canada (Newfoundland and Labrador) - Occupational Exposure Limits**

|                       |   |
|-----------------------|---|
| Local name            | Dipropylene glycol methyl ether (DPGME) |
| OEL TWA [ppm]         | 100 ppm                                 |
| OEL STEL [ppm]        | 150 ppm                                 |
| Notations and remarks | TLV® Basis: Liver & CNS eff             |
| Regulatory reference  | ACGIH 2022                              |

**Canada (Nova Scotia) - Occupational Exposure Limits**

|                |   |
|----------------|---|
| Local name     | Dipropylene glycol methyl ether (DPGME) |
| OEL TWA [ppm]  | 100 ppm                                 |
| OEL STEL [ppm] | 150 ppm                                 |

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|  |  |
|--|--|
| <b>Dipropylene glycol monomethyl ether (34590-94-8)</b>              |  |
| Notations and remarks  | TLV® Basis: Liver & CNS eff  |
| Regulatory reference   | ACGIH 2022   |
| <b>Canada (Nunavut) - Occupational Exposure Limits</b>               |  |
| Local name   | Dipropylene glycol methyl ether (DPGME)  |
| OEL TWA [ppm]  | 100 ppm  |
| OEL STEL [ppm]   | 150 ppm  |
| Notations and remarks  | Skin   |
| Regulatory reference   | Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)   |
| <b>Canada (Northwest Territories) - Occupational Exposure Limits</b> |  |
| OEL TWA [ppm]  | 100 ppm  |
| OEL STEL [ppm]   | 150 ppm  |
| Notations and remarks  | Skin   |
| Regulatory reference   | Occupation Health and Safety Regulations R-039-2015 (R-013-2020)                     |
| <b>Canada (Ontario) - Occupational Exposure Limits</b>               |  |
| OEL TWA [ppm]  | 100 ppm  |
| OEL STEL [ppm]   | 150 ppm  |
| <b>Canada (Prince Edward Island) - Occupational Exposure Limits</b>  |  |
| Local name   | Dipropylene glycol methyl ether (DPGME)  |
| OEL TWA [ppm]  | 100 ppm  |
| OEL STEL [ppm]   | 150 ppm  |
| Notations and remarks  | TLV® Basis: Liver & CNS eff  |
| Regulatory reference   | ACGIH 2022   |
| <b>Canada (Saskatchewan) - Occupational Exposure Limits</b>          |  |
| Local name   | Dipropylene glycol methyl ether (DPGME)  |
| OEL TWA [ppm]  | 100 ppm  |
| OEL STEL [ppm]   | 150 ppm  |
| Notations and remarks  | Skin   |
| Regulatory reference   | The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10          |
| <b>USA - ACGIH - Occupational Exposure Limits</b>                    |  |
| Local name   | Dipropylene glycol methyl ether (DPGME)  |
| ACGIH OEL TWA [ppm]  | 100 ppm  |
| ACGIH OEL STEL [ppm]   | 150 ppm  |
| Remark (ACGIH)   | TLV® Basis: Liver & CNS eff  |
| ACGIH chemical category  | Skin - potential significant contribution to overall exposure by the cutaneous route |
| Regulatory reference   | ACGIH 2022   |
| <b>USA - OSHA - Occupational Exposure Limits</b>                     |  |
| Local name   | Dipropylene glycol methyl ether  |
| OSHA PEL (TWA) [1]   | 600 mg/m <sup>3</sup>  |
| OSHA PEL (TWA) [2]   | 100 ppm  |
| OSHA PEL (STEL) [1]  | 900 mg/m <sup>3</sup> Vacated  |
| OSHA PEL (STEL) [2]  | 150 ppm Vacated  |
| Limit value category (OSHA)  | prevent or reduce skin absorption  |

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

|                                |                          |
|--------------------------------|--------------------------|
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 |
|--------------------------------|--------------------------|

### Naphtha, petroleum, hydrotreated heavy (64742-48-9)

#### USA - OSHA - Occupational Exposure Limits

|               |                      |
|---------------|----------------------|
| Remark (OSHA) | OELs not established |
|---------------|----------------------|

#### USA - ACGIH - Occupational Exposure Limits

|                |                      |
|----------------|----------------------|
| Remark (ACGIH) | OELs not established |
|----------------|----------------------|

#### Canada (all provinces) - Occupational Exposure Limits

|        |                      |
|--------|----------------------|
| Remark | 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.

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

#### 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:

In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with gas filter (type A2). Wear a NIOSH-approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions. 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.

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



## SECTION 9: Physical and chemical properties

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

|   |   |                             |
|---|---|-----------------------------|
| Physical state                              | : | Liquid                      |
| Colour                                      | : | Colourless to slight yellow |
| Odour                                       | : | Solvent                     |
| Odour 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           |

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|   |   |                   |
|---|---|-------------------|
| Flammability (solid, gas)                       | : | No data available |
| Vapour pressure                                 | : | < 1 mm Hg @ 20 °C |
| Relative vapour 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 |

### 9.2. Other information

No data available

### SECTION 10: Stability and reactivity

|                                    |   |   |
|------------------------------------|---|---|
| Reactivity                         | : | No dangerous reactions known under normal conditions of use.  |
| Chemical stability                 | : | Stable under recommended handling and storage conditions (see section 7).                                   |
| Possibility of hazardous reactions | : | No data available.  |
| Conditions to avoid                | : | No flames, no sparks. Eliminate all sources of ignition. Elevated temperature. Prevent vapour accumulation. |
| Incompatible materials             | : | Acids. Strong oxidizing agents.   |
| Hazardous decomposition products   | : | Carbon oxides (CO, CO <sub>2</sub> ). Toxic fumes.  |
| Hardening time:                    | : | No additional information available   |

### 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/m <sup>3</sup> Source: ECHA  |

#### 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.            |
| 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

#### 12.1. Toxicity

|  |   |                           |
|--|---|---------------------------|
| Ecology - general  | : | No information available. |
| Hazardous to the aquatic environment, short-term (acute) | : | Not classified            |

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Hazardous to the aquatic environment, long-term (chronic) : Not classified

### 12.2. Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential

No information available.

### 12.4. Mobility in soil

No information available.

### 12.5. Other adverse effects

Ozone : Not classified

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Obtain the consent of pollution control authorities before discharging to wastewater treatment plants. No discharges to surface waters are allowed without authorization under the Wastewater Systems Effluent Regulations. Follow all national, provincial and local requirements for wastewater discharge.

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

In accordance with TDG / DOT / IMDG / IATA

### 14.1. UN number

UN-No. (TDG) : Not Regulated  
 UN-No. (DOT) : Not Regulated  
 UN-No. (IMDG) : Not Regulated  
 UN-No. (IATA) : Not Regulated

### 14.2. UN proper shipping name

Not Applicable

### 14.3. Transport hazard class(es)

Not Applicable

### 14.4. Packing group

Not Applicable

### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Special precautions for user

This material has been determined to be 'NOT COMBUSTIBLE' according to 49 CFR 173.120; it does not sustain combustion by ASTM D4206.

Emergency Response Guide (ERG) Number : 128

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. National regulations

RailX™

All chemical substances in this product are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL) or are exempt.

### 15.2. International 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

## SECTION 16: Other information

Revision date : 25 October 2023

Other information : Revised by: Regulatory & Compliance.

Safety Data Sheet (SDS), Canada

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.