SAFETY DATA SHEET

Issuing Date 08-Nov-2018  Revision Date 05-Feb-2019  Revision Number 1

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1. IDENTIFICATION

Product identifier

Product Name BioRail All Season EP 1

(M)SDS Number 1360778

Recommended use of the chemical and restrictions on use

Recommended Use For industrial use only

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Identification Whitmores Manufacturing, LLC.

Address Whitmore Manufacturing
930 Whitmore Drive
Rockwall, Texas USA 75087

Telephone US Office: Phone:+1-972-771-1000 Fax:+1-972-722-2108

E-mail Sales@whitmores.com

Emergency telephone number

Company Emergency Phone Number 1-800-699-6318

Emergency Telephone Number CHEMTREC: +1-703-527-3887 (INTERNATIONAL)
1-800-424-9300 (NORTH AMERICA)

2. HAZARDS IDENTIFICATION

Classification

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

Appearance Brown  Physical state Paste / Gel  Odor Mild Petroleum
GHS Label elements, including precautionary statements

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

Precautionary Statements - Prevention
Obtain special instructions before use
Wear personal protective equipment/face protection

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other information

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance</th>
<th>Not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixture</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight-%</th>
<th>Hazardous Material Information Review Act registry number (HMIRA registry #)</th>
<th>Date HMIRA filed and date exemption granted (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated light naphthenic</td>
<td>64742-53-6</td>
<td>15-20</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated heavy naphthenic</td>
<td>64742-52-5</td>
<td>5-10</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-S,S’]-, (T-4)-</td>
<td>4259-15-8</td>
<td>1-3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Petroleum resins</td>
<td>64742-16-1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First aid measures

General advice     IF exposed or concerned: Get medical advice/attention.
Inhalation         Remove to fresh air.
Eye contact        Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact       Wash skin with soap and water.
Ingestion          Clean mouth with water and drink afterwards plenty of water.
Most important symptoms and effects, both acute and delayed

**Symptoms**
No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians**
Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media**
CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**
No information available.

**Hazardous Combustion Products**
Carbon oxides.

**Explosion Data**
- **Sensitivity to Mechanical Impact**: None.
- **Sensitivity to Static Discharge**: None.

**Special protective equipment for fire-fighters**
Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

### 6. ACCIDENTAL RELEASE MEASURES

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

**Personal precautions**
Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

**Other Information**
Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions**

**Environmental precautions**
See Section 12 for additional Ecological Information.

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

**Methods for containment**
Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**
Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards**
Clean contaminated objects and areas thoroughly observing environmental regulations.

### 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling**
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.
Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated light naphthenic 64742-53-6</td>
<td>5 mg/m³ (as oil mist) 2 mg/m³ (inhalable)</td>
<td>5 mg/m³ (as oil mist)</td>
<td></td>
</tr>
</tbody>
</table>

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992). See section 15 for national exposure control parameters.

Appropriate engineering controls

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection
No special protective equipment required.

Hand protection
Wear suitable gloves.

Skin and body protection
Wear suitable protective clothing.

Respiratory protection
No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations
Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical state
Paste / Gel

Appearance
Brown

Odor
Mild Petroleum

Color
No information available

Odor Threshold
No information available

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>UNKNOWN</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Melting / freezing point</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>400 °C</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
</tbody>
</table>
BioRail All Season EP 1

Upper flammability limit: No data available
Lower flammability limit: No data available
Vapor pressure: No data available
Vapor density: No data available
Relative density: 1.06
Water Solubility: No data available
Solubility(ies): No data available
Partition coefficient: n-octanol/water: No data available
Autoignition temperature: No data available
Decomposition temperature: No data available
Kinematic viscosity: No data available
Dynamic viscosity: No data available
Explosive properties: No information available
Oxidizing properties: No information available
Softening Point: No data available
Molecular Weight: No data available
VOC Content (%): No data available
Liquid Density: No data available
Bulk Density: No data available
Particle Size: No data available
Particle Size Distribution: No data available

10. STABILITY AND REACTIVITY

Reactivity: No information available.
Chemical stability: Stable under normal conditions.
Possibility of Hazardous Reactions: None under normal processing.
Hazardous Polymerization: Hazardous polymerization does not occur.
Conditions to avoid: None known based on information supplied.
Incompatible materials: None known based on information supplied.
Hazardous Decomposition Products: Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation: Specific test data for the substance or mixture is not available.
Eye contact: Specific test data for the substance or mixture is not available.
Skin contact: Specific test data for the substance or mixture is not available.
Ingestion: Specific test data for the substance or mixture is not available.

Information on toxicological effects

Symptoms: No information available.
BioRail All Season EP 1
Revision Date 05-Feb-2019

Numerical measures of toxicity

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral) 39,766.90 mg/kg

Unknown acute toxicity

No information available

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated light naphthenic</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td>2180 mg/m³ (Rat) 4 h</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated heavy naphthenic</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td></td>
</tr>
<tr>
<td>Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-S,S']-(T-4)</td>
<td>= 3100 mg/kg (Rat)</td>
<td></td>
<td>&gt; 5000 mg/kg (Rabbit)</td>
</tr>
</tbody>
</table>

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Daphnia Magna (Water Flea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated light naphthenic</td>
<td>96h LC50: &gt; 5000 mg/L (Oncorhynchus mykiss)</td>
<td>-</td>
<td>48h EC50: &gt; 1000 mg/L</td>
<td></td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated heavy naphthenic</td>
<td>96h LC50: &gt; 5000 mg/L (Oncorhynchus mykiss)</td>
<td>-</td>
<td>48h EC50: &gt; 1000 mg/L</td>
<td></td>
</tr>
<tr>
<td>Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-S,S']-(T-4)</td>
<td>96h EC50: 1.0 - 5.0 mg/L (Pseudokirchneriella subcapitata)</td>
<td>96h LC50: 1.0 - 5.0 mg/L (Pimephales promelas) 96h LC50: 10.0 - 35.0 mg/L (Pimephales promelas)</td>
<td>-</td>
<td>48h EC50: 1 - 1.5 mg/L</td>
</tr>
</tbody>
</table>
13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products
Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging
Do not reuse empty containers.

California Hazardous Waste Codes
141

This product contains one or more substances that are listed with the State of California as a hazardous waste.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc, bis(O,O-bis(2-ethylhexyl) phosphorodithioato-S,S')-, (T-4)- 4259-15-8</td>
<td>Toxic</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name: NOT REGULATED
Hazard Class: NON-REGULATED

TDG
Not regulated

MEX
NOT REGULATED

ICAO
NOT REGULATED

IATA
Proper Shipping Name: Not regulated

IMDG
Not regulated

RID
NOT REGULATED

ADR
NOT REGULATED

ADN
NOT REGULATED
Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Export Notification requirements Not applicable

International Inventories
TSCA Complies.
DSL/NDSL Complies.
EINECS/ELINCS Complies.
ENCS Contact supplier for inventory compliance status.
KECL Contact supplier for inventory compliance status.
PICCS Contact supplier for inventory compliance status.
AICS Contact supplier for inventory compliance status.

Legend
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight-%</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc, bis[O,O-bis(2-ethylhexyl)phosphorodithioato-S,S'-], (T-4)-</td>
<td>4259-15-8</td>
<td>1-3</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Acute Health Hazard No
Chronic Health Hazard No
Fire Hazard No
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc, bis[O,O-bis(2-ethylhexyl)phosphorodithioato-S,S'-], (T-4)-</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations
This product may contain substances regulated by state right-to-know regulations.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
<th>Rhode Island</th>
<th>Illinois</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated light naphthenic</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>64742-53-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated heavy naphthenic</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64742-52-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc, bis(O,O-bis(2-ethylhexyl) phosphorodithioato-S,S'-], (T-4)-</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4259-15-8</td>
<td></td>
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</tr>
</tbody>
</table>

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Properties - Physical hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Chronic Hazard Star Legend
* = Chronic Health Hazard

Prepared By
Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Issuing Date
08-Nov-2018

Revision Date
05-Feb-2019

Revision Note
No information available

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet