Enduraflex™ CU535BEP, EP, VE518BEP
Safety Data Sheet
According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 08/12/2016 Date of issue: 07/28/2016 Version: 1.1

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Enduraflex™ CU535BEP, EP, VE518BEP

Document Code: SDS225

Family: Rubber Lining

1.2. Intended Use of the Product

Use of the substance/mixture: EPDM Rubber Lining. For Professional Use Only.

1.3. Name, Address, and Telephone of the Responsible Party

Company
Blair Rubber Company
5020 Panther Pkwy
Seville, OH 44273
T 330-769-5583
blairrubber.com

1.4. Emergency Telephone Number

Emergency Number: 800-424-9300 (CHEMTREC), 202-483-7616 (International)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)
Skin Sens. 1 H317

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US): 

Signal Word (GHS-US): Warning


Precautionary Statements (GHS-US): P261 - Avoid breathing dust, fumes from decomposition, vapors from decomposition.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear eye protection, protective clothing, protective gloves.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P321 - Specific treatment (see Section 4).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P501 - Dispose of contents/container according to local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. When heated to decomposition, emits toxic fumes. May cause an allergic reaction in sensitive individuals. Contains chemicals with hazards that are associated with their dust and usual forms. The hazards associated with these chemicals are not bioavailable under normal conditions of use due to the compounds being polymer bound.

2.4. Unknown Acute Toxicity (GHS-US)

54.35 percent of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name | Product Identifier (CAS No) | %
--- | --- | ---
Carbon black | 1333-86-4 | 5.0 – 10.0
Enduraflex™ CU535BEP, EP, VE518BEP

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Component</th>
<th>(CAS No)</th>
<th>Proprietary</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plasticizer #1</td>
<td></td>
<td>(CAS No) Proprietary</td>
<td>3.0 – 7.0</td>
</tr>
<tr>
<td>Plasticizer #2</td>
<td></td>
<td>(CAS No) Proprietary</td>
<td>3.0 – 7.0</td>
</tr>
<tr>
<td>Activator #1</td>
<td>(CAS No)</td>
<td>Proprietary</td>
<td>1.0 – 5.0</td>
</tr>
<tr>
<td>Crosslinker #1</td>
<td>(CAS No)</td>
<td>Proprietary</td>
<td>0.1 – 1.0</td>
</tr>
<tr>
<td>Process Aid #13</td>
<td>(CAS No)</td>
<td>Proprietary</td>
<td>0.1 – 1.0</td>
</tr>
<tr>
<td>Crosslinker #1</td>
<td>(CAS No)</td>
<td>Proprietary</td>
<td>0.1 – 1.0</td>
</tr>
<tr>
<td>Activator #12</td>
<td>(CAS No)</td>
<td>Proprietary</td>
<td>0.1 – 1.0</td>
</tr>
<tr>
<td>Activator #16</td>
<td>(CAS No)</td>
<td>Proprietary</td>
<td>0.1 – 1.0</td>
</tr>
<tr>
<td>Antidegradant #5</td>
<td>(CAS No)</td>
<td>Proprietary</td>
<td>0.1 – 0.5</td>
</tr>
</tbody>
</table>

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

First-aid Measures After Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

First-aid Measures After Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: May cause an allergic reaction in sensitive individuals.

Symptoms/Injuries After Inhalation: When heated, material emits irritating fumes.

Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: Fumes from thermal decomposition may cause eye irritation.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide, foam.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Other Information: Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid prolonged contact with eyes, skin and clothing. Do not breathe fumes from fires or vapors from decomposition.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

6.1.2. For Emergency Responders
Protective Equipment: Equip cleanup crew with proper protection.
Emergency Procedures: Ventilate area.

6.2. Environmental Precautions
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and Material for Containment and Cleaning Up
For Containment: Sweep or vacuum the product to recover it.
Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely.

6.4. Reference to Other Sections
See Heading 8. Exposure controls and personal protection. Concerning disposal elimination after cleaning, see item 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling
Additional Hazards When Processed: When heated to decomposition, emits toxic fumes.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for Safe Storage, Including Any Incompatibilities
Technical Measures: Comply with applicable regulations.
Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

7.3. Specific End Use(s)
EPDM Rubber Lining. For Professional Use Only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters
For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

<table>
<thead>
<tr>
<th>Substance</th>
<th>USA ACGIH</th>
<th>USA NIOSH</th>
<th>USA IDLH</th>
<th>USA OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS No) 1333-86-4</td>
<td>ACGIH TWA (mg/m³) 3 mg/m³ (inhalable fraction)</td>
<td>NIOSH REL (TWA) (mg/m³) 3.5 mg/m³</td>
<td>US IDLH (mg/m³) 1750 mg/m³</td>
<td>OSHA PEL (TWA) (mg/m³) 3.5 mg/m³</td>
</tr>
<tr>
<td>Activator #1 (CAS No) Proprietary</td>
<td>USA ACGIH</td>
<td>USA NIOSH</td>
<td>USA IDLH</td>
<td>USA OSHA</td>
</tr>
<tr>
<td>ACGIH TWA (mg/m³)</td>
<td>2 mg/m³ (respirable fraction)</td>
<td>NIOSH REL (TWA) (mg/m³) 5 mg/m³ (dust and fume)</td>
<td>US IDLH (mg/m³) 500 mg/m³</td>
<td>OSHA PEL (TWA) (mg/m³) 5 mg/m³ (fume)</td>
</tr>
<tr>
<td>Activator #1 (CAS No) Proprietary</td>
<td>USA ACGIH</td>
<td>USA NIOSH</td>
<td>USA IDLH</td>
<td>USA OSHA</td>
</tr>
<tr>
<td>ACGIH STEL (mg/m³)</td>
<td>10 mg/m³ (respirable fraction)</td>
<td>NIOSH REL (STEL) (mg/m³) 10 mg/m³ (fume)</td>
<td>US IDLH (mg/m³) 500 mg/m³</td>
<td>OSHA PEL (TWA) (mg/m³) 15 mg/m³ (total dust)</td>
</tr>
<tr>
<td>Activator #1 (CAS No) Proprietary</td>
<td>USA ACGIH</td>
<td>USA NIOSH</td>
<td>USA IDLH</td>
<td>USA OSHA</td>
</tr>
<tr>
<td>NIOSH REL (ceiling) (mg/m³)</td>
<td>15 mg/m³ (dust)</td>
<td>US IDLH (mg/m³) 500 mg/m³</td>
<td>OSHA PEL (TWA) (mg/m³) 5 mg/m³ (respirable fraction)</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure Controls
Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.
Enduraflex™ CU535BEP, EP, VE518BEP
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Materials for Protective Clothing: Chemically resistant materials and fabrics.
Hand Protection: Wear chemically resistant protective gloves.
Eye Protection: Chemical goggles or safety glasses.
Skin and Body Protection: Wear suitable protective clothing.
Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Consumer Exposure Controls: Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties
- Physical State: Solid
- Appearance: Black
- Odor: No data available
- Odor Threshold: No data available
- pH: No data available
- Evaporation Rate: No data available
- Melting Point: No data available
- Freezing Point: No data available
- Boiling Point: No data available
- Flash Point: 500 °F (260 °C)
- Auto-ignition Temperature: No data available
- Decomposition Temperature: No data available
- Flammability (solid, gas): No data available
- Vapor Pressure: No data available
- Relative Vapor Density at 20 °C: No data available
- Specific Gravity: 1.13
- Density: 1.54 lb/ft² (1/4" thk)
- Solubility: Insoluble in water
- Partition Coefficient: N-octanol/water: No data available
- Viscosity: No data available

9.2. Other Information: No additional information available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.
10.2. Chemical Stability: Stable at standard temperature and pressure.
10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
10.5. Incompatible Materials: Strong acids, strong bases, strong oxidizers.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

<table>
<thead>
<tr>
<th>Substance</th>
<th>LD₅₀ Oral Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS No) 1333-86-4</td>
<td>&gt; 8000 mg/kg</td>
</tr>
<tr>
<td>Plasticizer #1 (CAS No) Proprietary</td>
<td>&gt; 5000 mg/kg</td>
</tr>
</tbody>
</table>

08/12/2016 EN [English US]
### Toxicity

<table>
<thead>
<tr>
<th>Compound</th>
<th>Route</th>
<th>LD50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>Dermal Rat</td>
<td>&gt; 2000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Plasticizer #2 (CAS No) Proprietary</td>
<td>Oral Rat</td>
<td>&gt; 5000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Activator #1 (CAS No) Proprietary</td>
<td>Oral Rat</td>
<td>&gt; 5000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Crosslinker #1 (CAS No) Proprietary</td>
<td>Oral Rat</td>
<td>&gt; 3000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>Dermal Rabbit</td>
<td>&gt; 2000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Acclerator #1 (CAS No) Proprietary</td>
<td>Oral Rat</td>
<td>690 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Activator #12 (CAS No) Proprietary</td>
<td>Oral Rat</td>
<td>&gt; 10000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Process Aid #13 (CAS No) Proprietary</td>
<td>Oral Rat</td>
<td>47000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Activator #16 (CAS No) Proprietary</td>
<td>Oral Rat</td>
<td>&gt; 7940 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Antidegradant #5 (CAS No) Proprietary</td>
<td>Oral Rat</td>
<td>&gt; 3750 mg/kg</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>Dermal Rabbit</td>
<td>&gt; 3600 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

**Skin Corrosion/Irritation:** Not classified

**Serious Eye Damage/Irritation:** Not classified

**Respiratory or Skin Sensitization:** May cause an allergic skin reaction.

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Not classified

**Carbon black (CAS No) 1333-86-4**

**IARC group:** 2B

**National Toxicology Program (NTP) Status:** Evidence of Carcinogenicity.

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** When heated, material emits irritating fumes.

**Symptoms/Injuries After Skin Contact:** May cause an allergic skin reaction.

**Symptoms/Injuries After Eye Contact:** Fumes from thermal decomposition may cause eye irritation.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** None expected under normal conditions of use.

### ECOLOGICAL INFORMATION

#### 12.1. Toxicity

<table>
<thead>
<tr>
<th>Compound</th>
<th>EC50/Fish 1</th>
<th>LC50/Fish 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS No) 1333-86-4</td>
<td>5600 mg/l</td>
<td>&gt; 5000 mg/l</td>
</tr>
<tr>
<td>Plasticizer #1 (CAS No) Proprietary</td>
<td>&gt; 1000 mg/l</td>
<td>&gt; 9.23 mg/l/4h</td>
</tr>
<tr>
<td>-</td>
<td>Daphnia magna</td>
<td>Oncorhynchus mykiss</td>
</tr>
<tr>
<td>Plasticizer #2 (CAS No) Proprietary</td>
<td>&gt; 1000 mg/l</td>
<td>&gt; 9.23 mg/l/4h</td>
</tr>
</tbody>
</table>

08/12/2016
### Activator #1 (CAS No) Proprietary

<table>
<thead>
<tr>
<th>Test</th>
<th>LC50 Fish 1</th>
<th>EC50 Daphnia 1</th>
<th>NOEC chronic fish</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>780 µg/l</td>
<td>0.122 mg/l</td>
<td>0.026 mg/l (Species: Jordanella floridae)</td>
</tr>
</tbody>
</table>

### Crosslinker #1 (CAS No) Proprietary

<table>
<thead>
<tr>
<th>Test</th>
<th>LC50 Fish 1</th>
<th>EC50 Daphnia 1</th>
<th>LC 50 Fish 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>866 mg/l</td>
<td>736 mg/l</td>
<td>14 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])</td>
</tr>
</tbody>
</table>

### Activator #2 (CAS No) Proprietary

<table>
<thead>
<tr>
<th>Test</th>
<th>LC50 Fish 1</th>
<th>EC50 Daphnia 1</th>
<th>LC 50 Fish 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.4 mg/l</td>
<td>4 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
<td>1.3 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])</td>
</tr>
</tbody>
</table>

### Activator #16 (CAS No) Proprietary

<table>
<thead>
<tr>
<th>Test</th>
<th>LC50 Fish 1</th>
<th>EC50 Daphnia 1</th>
<th>LC 50 Fish 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.32 - 2.73 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])</td>
<td>4.1 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
<td>0.42 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])</td>
</tr>
</tbody>
</table>

### 12.2. Persistence and Degradability

No additional information available.

### 12.3. Bioaccumulative Potential

<table>
<thead>
<tr>
<th>Test</th>
<th>Log Pow</th>
<th>BCF fish 1</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.17</td>
<td>&lt; 0.8</td>
<td>2.3 - 2.5</td>
</tr>
</tbody>
</table>

### 12.4. Mobility in Soil

No additional information available.

### 12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

### SECTION 14: TRANSPORT INFORMATION

#### 14.1. In Accordance with DOT

Not regulated for transport.

#### 14.2. In Accordance with IMDG

Not regulated for transport.

#### 14.3. In Accordance with IATA

Not regulated for transport.

### SECTION 15: REGULATORY INFORMATION

#### 15.1. US Federal Regulations

<table>
<thead>
<tr>
<th>Material</th>
<th>SARA Section 311/312 Hazard Classes</th>
<th>Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enduraflex™ CU535BEP, EP, VE518BEP</td>
<td></td>
<td>Immediate (acute) health hazard</td>
</tr>
<tr>
<td>Plasticizer #1 (CAS No) Proprietary</td>
<td></td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td>Plasticizer #2 (CAS No) Proprietary</td>
<td></td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td>Activator #1 (CAS No) Proprietary</td>
<td></td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td>Crosslinker #1 (CAS No) Proprietary</td>
<td></td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
</tbody>
</table>
## 15.2 US State Regulations

### Carbon black (CAS No) 1333-86-4

**U.S. - California - Proposition 65 - Carcinogens List**

| WARNING: This product contains chemicals known to the State of California to cause cancer. |

**Carbon black (CAS No) 1333-86-4**

- U.S. - Massachusetts - Right To Know List
- U.S. - New Jersey - Right to Know Hazardous Substance List
- U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances
- U.S. - Pennsylvania - RTK (Right to Know) List

### Plasticizer #2 (CAS No) Proprietary

**U.S. - Massachusetts - Right To Know List**

### Activator #1 (CAS No) Proprietary

- U.S. - Massachusetts - Right To Know List
- U.S. - New Jersey - Right to Know Hazardous Substance List
- U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
- U.S. - Pennsylvania - RTK (Right to Know) List

### Crosslinker #1 (CAS No) Proprietary

- 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

### Activator #16 (CAS No) Proprietary

- U.S. - New Jersey - Right to Know Hazardous Substance List

### Antidegradant #5 (CAS No) Proprietary

- 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, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date**: 08/12/2016

**Other Information**: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

| Skin Sens. 1 | Skin sensitization Category 1 |
| H317 | May cause an allergic skin reaction |

*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.*

SDS US (GHS HazCom)