# SAFETY DATA SHEET

## 1. Identification

**Material name:** Enviro-Dri® Field Membrane
**Material:** TBS731

**Recommended use and restriction on use**

**Recommended use:** Coatings
**Restrictions on use:** Not known.

**Manufacturer/Importer/Supplier/Distributor Information**
Tremco Barrier Solutions
6402 E. MAIN STREET
REYNOLDSBURG OH 43068
US

| | |
|---|---|
| **Contact person:** | EH&S Department |
| **Telephone:** | 216-292-5000 |
| **Emergency telephone number:** | 1-800-424-9300 (US); 1-613-996-6666 (Canada) |

## 2. Hazard(s) identification

**Hazard Classification**

**Health Hazards**

| | |
|---|---|
| Germ Cell Mutagenicity | Category 1B |
| Carcinogenicity | Category 1B |

**Unknown toxicity - Health**

| | |
|---|---|
| Acute toxicity, oral | 39.62 % |
| Acute toxicity, dermal | 39.88 % |
| Acute toxicity, inhalation, vapor | 100 % |
| Acute toxicity, inhalation, dust or mist | 100 % |

**Environmental Hazards**

| | |
|---|---|
| Acute hazards to the aquatic environment | Category 3 |

**Unknown toxicity - Environment**

| | |
|---|---|
| Acute hazards to the aquatic environment | 99.57 % |
| Chronic hazards to the aquatic environment | 100 % |

**Label Elements**

**Hazard Symbol:**

**Signal Word:** Danger

**Hazard Statement:** May cause genetic defects.
May cause cancer.
Harmful to aquatic life.

**Precautionary Statements**

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

**Response:** IF exposed or concerned: Get medical advice/attention.

**Storage:** Store locked up.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Hazard(s) not otherwise classified (HNOC):** None.

## 3. Composition/information on ingredients

**Mixtures**

| Chemical Identity | CAS number | Content in percent (%)* |
|---|---|---|
| Asphalt | 8052-42-4 | 40 - 70% |
| Stoddard solvent (Mineral Spirits) | 8052-41-3 | 3 - 7% |
| Potassium hydroxide | 1310-58-3 | 0.1 - 1% |
| 1,2,4-Trimethylbenzene | 95-63-6 | 0.1 - 1% |
| Ammonium hydroxide | 1336-21-6 | 0.1 - 1% |

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First-aid measures

**Ingestion:** Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

**Inhalation:** Move to fresh air.

**Skin Contact:** Wash skin thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.

**Eye contact:** Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** May cause skin and eye irritation.

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

**Treatment:** Symptoms may be delayed.

## 5. Fire-fighting measures

**General Fire Hazards:** No unusual fire or explosion hazards noted.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** No data available.

**Methods and material for containment and cleaning up:** Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

**Notification Procedures:** In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Environmental Precautions:** Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.

## 7. Handling and storage

**Precautions for safe handling:** Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities:** Store locked up.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

| Chemical Identity | Type | Exposure Limit Values | Source |
|---|---|---|---|
| Asphalt - Inhalable fraction. - as benzene solubles | TWA | 0.5 mg/m3 | US. ACGIH Threshold Limit Values (2011) |
| Stoddard solvent (Mineral Spirits) | TWA | 100 ppm | US. ACGIH Threshold Limit Values (2011) |
| | PEL | 500 ppm 2,900 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Potassium hydroxide | Ceiling | 2 mg/m3 | US. ACGIH Threshold Limit Values (2011) |
| 1,2,4-Trimethylbenzene | REL | 25 ppm 125 mg/m3 | US. NIOSH: Pocket Guide to Chemical Hazards (2010) |
| | TWA | 25 ppm 125 mg/m3 | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989) |
| | TWA | 25 ppm 125 mg/m3 | US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008) |
| | AN ESL | 25 ppb | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011) |
| | ST ESL | 140 ppb | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013) |
| | ST ESL | 700 µg/m3 | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013) |
| | AN ESL | 125 µg/m3 | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011) |
| | TWA PEL | 25 ppm 125 mg/m3 | US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010) |
| | TWA | 25 ppm | US. ACGIH Threshold Limit Values (2011) |
| Ammonium hydroxide | STEL | 35 ppm | US. ACGIH Threshold Limit Values (2011) |
| | TWA | 25 ppm | US. ACGIH Threshold Limit Values (2011) |
| | PEL | 50 ppm 35 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |

| Chemical name | Type | Exposure Limit Values | Source |
|---|---|---|---|
| Asphalt - Aerosol, inhalable. - as benzene solubles | TWA | 0.5 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Asphalt - Inhalable fraction. - as benzene solubles | TWA | 0.5 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Asphalt - Fume. | TWA | 5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Stoddard solvent (Mineral Spirits) | STEL | 580 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | TWA | 290 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Stoddard solvent (Mineral Spirits) | TWA | 100 ppm | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Stoddard solvent (Mineral Spirits) | TWA | 100 ppm 525 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| 1,2,4-Trimethylbenzene | TWA | 25 ppm 123 mg/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009) |
| 1,2,4-Trimethylbenzene | TWA | 25 ppm | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| 1,2,4-Trimethylbenzene | TWA | 25 ppm | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| 1,2,4-Trimethylbenzene | TWA | 25 ppm 123 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |

**Appropriate Engineering Controls** Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

**Individual protection measures, such as personal protective equipment**

**General information:** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory and eye protection may be needed in special circumstances, such as poorly ventilated spaces, heating, evaporation of liquids from large surfaces, spraying of mists, mechanical generation of dusts, drying of solids, etc.

**Eye/face protection:** Wear safety glasses with side shields (or goggles).

**Skin Protection**

**Hand Protection:** Use suitable protective gloves if risk of skin contact.

**Other:** Wear suitable protective clothing.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:** Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product.

## 9. Physical and chemical properties

| | |
|---|---|
| **Appearance** | |
| **Physical state:** | liquid |
| **Form:** | liquid |
| **Color:** | Brown |
| **Odor:** | Slight odor |
| **Odor threshold:** | No data available. |
| **pH:** | 10.0 - 11.8 |
| **Melting point/freezing point:** | -0.00 °C 32 °F |
| **Initial boiling point and boiling range:** | 100 °C 212 °F |
| **Flash Point:** | > 100 °C > 212 °F |
| **Evaporation rate:** | Slower than Ether |
| **Flammability (solid, gas):** | No |
| **Upper/lower limit on flammability or explosive limits** | |
| **Flammability limit - upper (%):** | No data available. |
| **Flammability limit - lower (%):** | No data available. |
| **Explosive limit - upper (%):** | No data available. |
| **Explosive limit - lower (%):** | No data available. |
| **Vapor pressure:** | No data available. |
| **Vapor density:** | Vapors are heavier than air and may travel along the floor and in the bottom of containers. |
| **Relative density:** | 0.98 |
| **Solubility(ies)** | |
| **Solubility in water:** | Dispersible |
| **Solubility (other):** | No data available. |
| **Partition coefficient (n-octanol/water):** | No data available. |
| **Auto-ignition temperature:** | No data available. |
| **Decomposition temperature:** | No data available. |
| **Viscosity:** | No data available. |

## 10. Stability and reactivity

| | |
|---|---|
| **Reactivity:** | No data available. |
| **Chemical Stability:** | Material is stable under normal conditions. |
| **Possibility of hazardous reactions:** | No data available. |
| **Conditions to avoid:** | Avoid heat or contamination. |
| **Incompatible Materials:** | Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). |

| | |
|---|---|
| **Hazardous Decomposition Products:** | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. |

## 11. Toxicological information

**Information on likely routes of exposure**

| | |
|---|---|
| **Inhalation:** | In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes. |
| **Skin Contact:** | May be harmful in contact with skin. Causes mild skin irritation. |
| **Eye contact:** | Eye contact is possible and should be avoided. |
| **Ingestion:** | May be ingested by accident. Ingestion may cause irritation and malaise. |

**Symptoms related to the physical, chemical and toxicological characteristics**

| | |
|---|---|
| **Inhalation:** | No data available. |
| **Skin Contact:** | No data available. |
| **Eye contact:** | No data available. |
| **Ingestion:** | No data available. |

**Information on toxicological effects**

**Acute toxicity (list all possible routes of exposure)**

**Oral**

| | |
|---|---|
| **Product:** | Not classified for acute toxicity based on available data. |

**Specified substance(s):**

| | |
|---|---|
| Asphalt | LD 50 (Rat): > 5,000 mg/kg |
| Potassium hydroxide | LD 50 (Rat): 333 mg/kg |
| 1,2,4-Trimethylbenzene | LD 50 (Rat): 3,280 mg/kg |
| Ammonium hydroxide | LD 50 (Rat): 350 mg/kg |

**Dermal**

| | |
|---|---|
| **Product:** | ATEmix: 2,905.08 mg/kg |

**Inhalation**

| | |
|---|---|
| **Product:** | |

**Specified substance(s):**

| | |
|---|---|
| Asphalt | LC 50 (Rat): > 94.4 mg/m3 |
| 1,2,4-Trimethylbenzene | LC 50 (Rat): 10,200 mg/m3 |

**Repeated dose toxicity**

**Product:** No data available.

**Skin Corrosion/Irritation**

**Product:** No data available.

**Specified substance(s):**

| | |
|---|---|
| Asphalt | in vivo (Rabbit): Not irritant Experimental result, Key study |
| Potassium hydroxide | in vivo (Rabbit): Corrosive Experimental result, Weight of Evidence study |
| 1,2,4-Trimethylbenzene | in vivo (Rabbit): Irritating Read-across from supporting substance (structural analogue or surrogate), Key study |

**Serious Eye Damage/Eye Irritation**

**Product:** No data available.

**Specified substance(s):**

| | |
|---|---|
| Asphalt | Rabbit, 24 hrs: Not irritating |
| 1,2,4-Trimethylbenzene | Rabbit, 30 min: Not irritating |

**Respiratory or Skin Sensitization**

**Product:** No data available.

**Carcinogenicity**

**Product:** May cause cancer.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

| | |
|---|---|
| Asphalt | Overall evaluation: Possibly carcinogenic to humans. |

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**
**Product:** No data available.

**In vivo**
**Product:** No data available.

**Reproductive toxicity**
**Product:** No data available.

**Specific Target Organ Toxicity - Single Exposure**
**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**
**Product:** No data available.

**Aspiration Hazard**
**Product:** No data available.

**Other effects:** No data available.

## 12. Ecological information

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**
**Product:** No data available.

**Specified substance(s):**

| | |
|---|---|
| Potassium hydroxide | LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 80 mg/l Mortality |
| 1,2,4-Trimethylbenzene | LC 50 (Fathead minnow (Pimephales promelas), 96 h): 7.19 - 8.28 mg/l Mortality |

**Aquatic Invertebrates**
**Product:** No data available.

**Chronic hazards to the aquatic environment:**

**Fish**
**Product:** No data available.

**Specified substance(s):**

| | |
|---|---|
| Asphalt | NOAEL (Oncorhynchus mykiss, 28 d): >= 1,000 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study<br>LL 50 (Oncorhynchus mykiss, 28 d): > 1,000 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study |

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**

**Product:** No data available.

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative potential**

**Bioconcentration Factor (BCF)**

**Product:** No data available.

**Partition Coefficient n-octanol / water (log Kow)**

**Product:** No data available.

**Specified substance(s):**

| | |
|---|---|
| Stoddard solvent (Mineral Spirits) | Log Kow: 3.16 - 7.15 |

**Mobility in soil:** No data available.

**Other adverse effects:** Harmful to aquatic organisms.

## 13. Disposal considerations

**Disposal instructions:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated Packaging:** No data available.

## 14. Transport information

**TDG:**

Not Regulated

**CFR / DOT:**

Not Regulated

**IMDG:**

Not Regulated

## 15. Regulatory information

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

| Chemical Identity | OSHA hazard(s) |
|---|---|
| Acrylonitrile | Liver |
| | Central nervous system |
| | Flammability |
| | Eye irritation |
| | Skin irritation |
| | Skin sensitization |
| | Respiratory irritation |
| | Cancer |
| | Acute toxicity |

**CERCLA Hazardous Substance List (40 CFR 302.4):**

| Chemical Identity | Reportable quantity |
|---|---|
| Asphalt | 100 lbs. |
| Potassium hydroxide | 1000 lbs. |
| Ammonium hydroxide | 1000 lbs. |
| Hydrogen sulfide | 100 lbs. |
| Ethyl Acrylate | 1000 lbs. |
| Acrylamide | 5000 lbs. |
| Acrylonitrile | 100 lbs. |

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Delayed (Chronic) Health Hazard

**SARA 302 Extremely Hazardous Substance**

| Chemical Identity | Reportable quantity | Threshold Planning Quantity |
|---|---|---|
| Hydrogen sulfide | 100 lbs. | 500 lbs. |
| Acrylamide | 5000 lbs. | - -- - |
| Acrylonitrile | 100 lbs. | 10000 lbs. |

**SARA 304 Emergency Release Notification**

| Chemical Identity | Reportable quantity |
|---|---|
| Asphalt | 100 lbs. |
| Potassium hydroxide | 1000 lbs. |
| Ammonium hydroxide | 1000 lbs. |
| Hydrogen sulfide | 100 lbs. |
| Ethyl Acrylate | 1000 lbs. |
| Acrylamide | 5000 lbs. |
| Acrylonitrile | 100 lbs. |

**SARA 311/312 Hazardous Chemical**

| Chemical Identity | Threshold Planning Quantity |
|---|---|
| Hydrogen sulfide | 500lbs |
| Acrylamide | 500lbs |
| Acrylonitrile | 500lbs |
| Asphalt | 10000 lbs |
| Stoddard solvent (Mineral Spirits) | 10000 lbs |
| Potassium hydroxide | 10000 lbs |
| 1,2,4-Trimethylbenzene | 10000 lbs |
| Ammonium hydroxide | 10000 lbs |

**SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

| Chemical Identity | Reportable quantity |
|---|---|
| Hydrogen sulfide | lbs |
| Acrylonitrile | lbs |

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

## US State Regulations

**US. California Proposition 65**

**WARNING**
Cancer and Reproductive Harm - www.P65Warnings.ca.gov

**US. New Jersey Worker and Community Right-to-Know Act**

**Chemical Identity**
Asphalt
Stoddard solvent (Mineral Spirits)

**US. Massachusetts RTK - Substance List**

**Chemical Identity**
Asphalt
Stoddard solvent (Mineral Spirits)
Hydrogen sulfide
Ethyl Acrylate
Acrylamide
Acrylonitrile

**US. Pennsylvania RTK - Hazardous Substances**

**Chemical Identity**
Asphalt
Stoddard solvent (Mineral Spirits)

**US. Rhode Island RTK**

**Chemical Identity**
Asphalt
Stoddard solvent (Mineral Spirits)

**International regulations**

**Montreal protocol**

Not applicable

**Stockholm convention**

Not applicable

**Rotterdam convention**

Not applicable

**Kyoto protocol**

Not applicable

**VOC:**

| | | |
|---|---|---|
| Regulatory VOC (less water and exempt solvent) | : | 66 g/l |
| VOC Method 310 | : | 4.43 % |

**Inventory Status:**

| | |
|---|---|
| Australia AICS: | One or more components in this product are not listed on or exempt from the Inventory. |
| Canada DSL Inventory List: | One or more components in this product are not listed on or exempt from the Inventory. |
| EINECS, ELINCS or NLP: | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan (ENCS) List: | One or more components in this product are not listed on or exempt from the Inventory. |
| China Inv. Existing Chemical Substances: | One or more components in this product are not listed on or exempt from the Inventory. |
| Korea Existing Chemicals Inv. (KECI): | One or more components in this product are not listed on or exempt from the Inventory. |
| Canada NDSL Inventory: | One or more components in this product are not listed on or exempt from the Inventory. |
| Philippines PICCS: | One or more components in this product are not listed on or exempt from the Inventory. |
| US TSCA Inventory: | All components in this product are listed on or exempt from the Inventory. |
| New Zealand Inventory of Chemicals: | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan ISHL Listing: | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan Pharmacopoeia Listing: | One or more components in this product are not listed on or exempt from the Inventory. |

## 16.Other information, including date of preparation or last revision

| | |
|---|---|
| **Revision Date:** | 10/05/2018 |
| **Version #:** | 1.2 |
| **Further Information:** | No data available. |

**Disclaimer:**

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.