# SAFETY DATA SHEET

## 1. Identification

**Material name:** BURMASTIC ADHESIVE SF 5 GAL  
**Material:** 365700 805

**Recommended use and restriction on use**
- **Recommended use:** Coatings  
- **Restrictions on use:** Not known.

**Manufacturer/Importer/Supplier/Distributor Information**
Tremco Incorporated  
3735 Green Road  
BEACHWOOD OH 44122  
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**
- Respiratory sensitizer: Category 1  
- Skin sensitizer: Category 1  
- Carcinogenicity: Category 1B

**Unknown toxicity - Health**
- Acute toxicity, oral: 8.74 %  
- Acute toxicity, dermal: 26.41 %  
- Acute toxicity, inhalation, vapor: 99.98 %  
- Acute toxicity, inhalation, dust or mist: 100 %

**Label Elements**

**Hazard Symbol:**

![Hazard Symbol]

**Signal Word:** Danger
Hazard Statement: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause cancer.

Precautionary Statements
Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. [In case of inadequate ventilation] wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. 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 inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. Specific treatment (see on this label). Wash contaminated clothing before reuse.

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

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS number</th>
<th>Content in percent (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>15 - 40%</td>
</tr>
<tr>
<td>Aromatic Hydrocarbons</td>
<td>68447-30-5</td>
<td>7 - 13%</td>
</tr>
<tr>
<td>4,4’-Methylene bis(phenylisocyanate)</td>
<td>101-68-8</td>
<td>1 - 5%</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>108-31-6</td>
<td>0.5 - 1.5%</td>
</tr>
<tr>
<td>Calcium oxide</td>
<td>1305-78-8</td>
<td>0.1 - 1%</td>
</tr>
<tr>
<td>Diphenylmethane diisocyanate</td>
<td>26447-40-5</td>
<td>0.1 - 1%</td>
</tr>
</tbody>
</table>

* 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: Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. Move to fresh air. If breathing is difficult, give oxygen.
### Skin Contact:
If skin irritation occurs: Get medical advice/attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical 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.

#### Treatment:
Symptoms may be delayed.

### 5. Fire-fighting measures

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

#### Suitable (and unsuitable) extinguishing media

<table>
<thead>
<tr>
<th>Suitable extinguishing media</th>
<th>Use fire-extinguishing media appropriate for surrounding materials.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsuitable extinguishing media</td>
<td>Do not use water jet as an extinguisher, as this will spread the fire.</td>
</tr>
</tbody>
</table>

#### 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:
Ventilate closed spaces before entering them. Evacuate area. See Section 8 of the SDS for Personal Protective Equipment. Keep unauthorized personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

#### 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: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

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. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling. 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

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt - Inhalable fraction. - as benzene solubles</td>
<td>TWA</td>
<td>0.5 mg/m3</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td>4,4'-Methylene bis(phenylisocyanate)</td>
<td>TWA</td>
<td>0.005 ppm</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td></td>
<td>Ceiling</td>
<td>0.02 ppm</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td>Maleic anhydride - Inhalable fraction and vapor.</td>
<td>TWA</td>
<td>0.01 mg/m3</td>
<td>US. ACGIH Threshold Limit Values (02 2013)</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>PEL</td>
<td>0.25 ppm</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td>Calcium oxide</td>
<td>TWA</td>
<td>2 mg/m3</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td></td>
<td>PEL</td>
<td>5 mg/m3</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt - Aerosol, inhalable. - as benzene solubles</td>
<td>TWA</td>
<td>0.5 mg/m3</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>Asphalt - Inhalable fraction. - as benzene solubles</td>
<td>TWA</td>
<td>0.5 mg/m3</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>Asphalt - Fume.</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
<tr>
<td>4,4'-Methylene bis(phenylisocyanate)</td>
<td>CEILING</td>
<td>0.01 ppm</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.005 ppm</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
</tbody>
</table>
### 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:
Use personal protective equipment as required.

#### Eye/face protection:
Wear goggles/face shield.

#### Skin Protection

- **Hand Protection:** Use suitable protective gloves if risk of skin contact.
- **Other:** Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

#### Respiratory Protection:
If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

#### Hygiene measures:
Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

### 9. Physical and chemical properties

#### Appearance

- **Physical state:** liquid
- **Form:** Viscous Liquid
- **Color:** Black
- **Odor:** Mild petroleum/solvent
- **Odor threshold:** No data available.
- **pH:** No data available.

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<table>
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<tr>
<th>Chemical</th>
<th>TWA</th>
<th>Control Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4'-Methylene bis(phenylisocyanate)</td>
<td>TWA</td>
<td>0.005 ppm Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)</td>
</tr>
<tr>
<td></td>
<td>CEV</td>
<td>0.02 ppm Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)</td>
</tr>
<tr>
<td>4,4'-Methylene bis(phenylisocyanate)</td>
<td>TWA</td>
<td>0.005 ppm 0.051 mg/m3 Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>TWA</td>
<td>0.1 ppm Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>Maleic anhydride - Inhalable fraction and vapor.</td>
<td>TWA</td>
<td>0.01 mg/m3 Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>TWA</td>
<td>0.25 ppm 1.0 mg/m3 Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
</tbody>
</table>
Melting point/freezing point: No data available.
Initial boiling point and boiling range: No data available.
Flash Point: 149 ºC 300 ºF (Setaflash Closed Cup)
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: 1.03
Solubility(ies)
  Solubility in water: Practically Insoluble
  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: Causes mild skin irritation. May cause an allergic skin reaction.
  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: ATEmix: 220,864.66 mg/kg

Dermal
Product: ATEmix: 5,163.72 mg/kg

Inhalation
Product: Not classified for acute toxicity based on available data.

Specified substance(s):
Asphalt LC 50 (Rat): > 94.4 mg/m3

Maleic anhydride LC 50 (Rat): > 4.35 mg/l

Calcium oxide LC 50 (Rat): 40 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

4,4'-Methylene bis(phenylisocyanate) in vivo (Rabbit): Irritating  Read-across based on grouping of substances (category approach), Key study

Maleic anhydride in vivo (Rabbit): Corrosive  Experimental result, Weight of Evidence study

Calcium oxide 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
Maleic anhydride  Rabbit, 24 hrs: Highly irritating

**Respiratory or Skin Sensitization**

Product: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause sensitization by inhalation.

**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):
Maleic anhydride LC 50 (Bluegill (Lepomis macrochirus), 24 h): 150 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 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.

Mobility in soil: No data available.
Other adverse effects: No data available.

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)
None present or none present in regulated quantities.
CERCLA Hazardous Substance List (40 CFR 302.4):

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>4,4’-Methylene bis(phenylisocyanate)</td>
<td>5000 lbs.</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>5000 lbs.</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>Acetic acid</td>
<td>5000 lbs.</td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
- Delayed (Chronic) Health Hazard
- Immediate (Acute) Health Hazards

SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

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</tbody>
</table>

SARA 311/312 Hazardous Chemical

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Threshold Planning Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Aromatic Hydrocarbons</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>4,4’-Methylene bis(phenylisocyanate)</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Calcium oxide</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Diphenylmethane</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>diisocyanate</td>
<td></td>
</tr>
</tbody>
</table>

SARA 313 (TRI Reporting)

<table>
<thead>
<tr>
<th>Chemical Identity</th>
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<tr>
<td>4,4’-Methylene bis(phenylisocyanate)</td>
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</tbody>
</table>

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
None present or none present in regulated quantities.

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 - www.P65Warnings.ca.gov

US. New Jersey Worker and Community Right-to-Know Act
Chemical Identity
Asphalt
4,4'-Methylene bis(phenylisocyanate)

US. Massachusetts RTK - Substance List
Chemical Identity
Asphalt
4,4'-Methylene bis(phenylisocyanate)
Crystalline Silica (Quartz)/ Silica Sand

US. Pennsylvania RTK - Hazardous Substances
Chemical Identity
Asphalt
4,4'-Methylene bis(phenylisocyanate)

US. Rhode Island RTK
Chemical Identity
Asphalt
4,4'-Methylene bis(phenylisocyanate)

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) : 53 g/l
VOC Method 310 : 5.10 %
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: One or more components in this product are not 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: 07/21/2018
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.