

## Download Product Installation Guide

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[Matrix 502 Asphaltic Expansion Joint System Installation Sheet](#)

## Section 1. Identification

<b>GHS Product Identifier</b>	: Matrix™ 502 Asphaltic Expansion Joint
<b>Relevant identified uses</b>	: Expansion Joint System.
<b>Supplier</b>	: The D.S. Brown Company 300 East Cherry Street North Baltimore, Ohio 45872 419-257-3561
<b>In Case of Emergency</b>	: Chemtrec 1-800-424-9300 International 01-703-741-5500
<b>Information Department</b>	: Environmental, health and safety department.

## Section 2. Hazards Identification

<b>Physical Hazards</b>	: Not classified.
<b>Health Hazards</b>	: Not classified.
<b>Environmental Hazards</b>	: Not classified.
<b>OSHA Defined Hazards</b>	: Not classified.
	*Hazards not stated here are “Not classified”, “Not applicable” or “Classification not possible”.
<b>Label Elements</b>	
<b>Hazard Symbol</b>	: None
<b>Signal Word</b>	: Not applicable.
<b>Hazard Statement</b>	: Not applicable.
<b>Prevention</b>	: Not applicable.
<b>Response</b>	: Not applicable.
<b>Storage</b>	: Not applicable.
<b>Disposal</b>	: Not applicable.
<b>Hazard(s) Not Otherwise Classified (HNOC)</b>	: None known.
<b>Supplemental Information</b>	: None



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## Section 3. Composition/Information on Ingredients

**Chemical Characterization** : Mixtures

Chemical Name	Common Name and Synonyms	CAS No.	%
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC		64742-52-5	0-10
QUARTZ		14808-60-7	0 - 75
ASPHALT		8052-42-4	10 - 40
CALCIUM CARBONATE		471-34-1	0-10
Other components below reportable levels			0 - 75

## Section 4. First Aid Measures

- Inhalation** : If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention, if needed. Call a physician if symptoms develop or persist.
- Skin Contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Thoroughly wash (or discard) clothing and shoes before reuse.
- Eye Contact** : Immediately flush eyes with plenty of water for at least 15 minutes. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Get medical attention if irritation develops and persists.
- Ingestion** : Rinse mouth. Do not induce vomiting. Do not use mouth-to-mouth method if victim ingested the substance. Call a POISON CENTER or doctor/physician if you feel unwell.
- Most Important Symptoms/ Effects, Acute and Delayed** : Not available.
- Indication of Immediate Medical Attention and Special Treatment Needed** : In case of ingestion, the decision of whether or not to induce vomiting should be made by the attending physician. Certain pre-existing conditions may make workers particularly susceptible to the effects of this chemical: asthma, allergies, impaired pulmonary function.
- General Information** : If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Discard any shoes or clothing items that cannot be decontaminated.

## Section 5. Fire-Fighting Measures

- Special Firefighting Media** : Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>). Addition of water or foam to the fire may cause frothing.
- Unsuitable Extinguishing Media** : Do not use a solid water stream as it may scatter and spread fire.

## Section 5. Fire-Fighting Measures *cont'd.*

- Specific Hazards Arising from the Chemical** : Fire may produce irritating, corrosive and/or toxic gases. Development of hazardous combustion gases or vapors possible in the event of a fire. The following may develop: Acrolein.
- Special Protective Equipment and Precautions for Firefighters** : Firefighters must use standard protective equipment including flame retardant coat helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Firefighters should wear full protective clothing including self contained breathing apparatus. Structural firefighters protective clothing will only provide limited protection.
- Fire-Fighting Equipment/ Instructions** : In case of fire and/or explosion do not breathe fumes. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. In the event of fire, cool tanks with water spray. By fire, toxic gases may be formed (COx, NOx). Keep run-off water out of sewers and water sources. Dike for water control.
- Specific Methods** : In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.

## Section 6. Accidental Release Measures

- Personal Precautions, Protective Equipment and Emergency Procedures** : Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Ventilate closed spaces before entering them. Do not touch or walk through spilled material.
- Methods and Materials for Containment and Cleaning Up** : ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Dike far ahead of spill for later disposal. Following product recovery, flush area with water. Never return spills in original containers for re-use.
- Environmental Precautions** : Prevent further leakage or spillage if safe to do so. Runoff or release to sewer, waterway or ground is forbidden.

## Section 7. Handling and Storage

- Precautions for Safe Handling** : The product is non-combustible. If heated, irritating vapors may be formed. Do not use in areas without adequate ventilation. Wash hands thoroughly after handling. Wash hands after handling. Observe good industrial hygiene practices.
- Conditions for Safe Storage, Including Any Incompatibilities** : Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a well-ventilated place. Keep the container tightly closed and dry. Store in a closed container away from incompatible materials. Keep out of the reach of children.

## Section 8. Exposure Controls/Personal Protection

### OCCUPATIONAL EXPOSURE LIMITS

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CALCIUM CARBONATE (CAS 471-34-1)	PEL	5 mg/m3 15 mg/m3	Respirable fraction Total dust
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC (CAS 64742-52-5)	PEL	5 mg/m3	Mist

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
QUARTZ (CAS 14808-60-7)	TWA	0.3 mg/m3 0.1 mg/m3 2.4 mppcf	Total dust Respirable Respirable

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
ASPHALT (CAS 8052-42-4)	TWA	0.5 mg/m3	Inhalable fraction
QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
ASPHALT (CAS 8052-42-4)	Ceiling	5 mg/m3	Fume
CALCIUM CARBONATE (CAS 471-34-1)	TWA	5 mg/m3 10 mg/m3	Respirable Total
DISTILLATES STEL(PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC (CAS 64742-52-5)	STEL TWA	10 mg/m3 5 mg/m3	Mist Mist
QUARTZ (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust

**Biological Limit Values** : No biological exposure limits noted for the ingredient(s).

**Appropriate Engineering Controls** : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure adequate ventilation, especially in confined areas.

### INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT

**Eye/Face Protection** : Wear safety glasses; chemical goggles (if splashing is possible). Wear chemical goggles; face shield (if handling molten material).

**Hand Protection** : Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.

**Other** : Wear suitable protective clothing and eye/face protection. Use of an impervious apron is recommended.

## Section 8. Exposure Controls/Personal Protection *cont'd.*

### INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT *cont'd.*

<b>Respiratory Protection</b>	: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
<b>Thermal Hazards</b>	: During product use, there is a risk of thermal burns.
<b>General Hygiene Considerations</b>	: When using do not smoke. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

## Section 9. Physical and Chemical Properties

<b>Appearance</b>	: Solid
<b>Physical State</b>	: Solid
<b>Form</b>	: Solid
<b>Color</b>	: Black, dark brown.
<b>Odor</b>	: Product is a black, semi-solid with a burnt tar odor.
<b>Odor Threshold</b>	: Not available.
<b>pH</b>	: Not available.
<b>Melting Point/Freezing Point</b>	: 150 - 250°F (65.56 - 121.11°C) ASTM D36 Softening Point
<b>Initial Boiling Point and Boiling Range</b>	: > 800°F (> 426.67°C)
<b>Flash Point</b>	: > 400.0°F (> 204.4°C)
<b>Evaporation Rate</b>	: Not available.
<b>Flammability (Solid, Gas)</b>	: Not available.
<b>Upper/Lower Flammability or Explosive Limits</b>	
<b>Flammability Limit - Lower (%)</b>	: Not available.
<b>Flammability Limit - Upper (%)</b>	: Not available.
<b>Explosive Limit - Lower (%)</b>	: Not available.
<b>Explosive Limit - Upper (%)</b>	: Not available.

## Section 9. Physical and Chemical Properties *cont'd.*

Vapor Pressure	: 2.04 hPa estimated.
Vapor Density	: Not available.
Relative Density	: Not available.
Solubility(ies)	
Solubility (Water)	: Not available.
Partition Coefficient (n-Octanol/Water)	: Not available.
Auto-Ignition Temperature	: > 700 °F (> 371.11 °C)
Decomposition Temperature	: Not available.
Viscosity	: Not available.
Other Information	
Density	: Not available.
Percent Volatile	: 0%
Specific Gravity	: 1 - 2.2

## Section 10. Stability and Reactivity

Reactivity	: Not available.
Chemical Stability	: Material is stable under normal conditions.
Possibility of Hazardous Reactions	: Hazardous polymerization does not occur.
Conditions to Avoid	: Strong oxidizing agents.
Incompatible Materials	: Incompatible with oxidizing agents.
Hazardous Decomposition Products	: Upon decomposition, product emits acrid dense smoke with carbon dioxide carbon monoxide, trace oxides of nitrogen and sulfur, and water.

## Section 11. Toxicological Information

### INFORMATION ON LIKELY ROUTES OF EXPOSURE

Ingestion	: May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
Inhalation	: May cause irritation to the respiratory system.
Skin Contact	: Irritating to skin.
Eye Contact	: Causes eye irritation. Molten material will produce thermal burns.
Symptoms Related to the Physical, Chemical and Toxicological Characteristics	: Not available.

## Section 11. Toxicological Information *cont'd.*

### INFORMATION ON TOXICOLOGICAL EFFECTS

#### Acute Toxicity

Product/Components	Test	Species	Test Results
Matrix Products (CAS Mixture)	Oral LD50	Mouse Rat	17340.7969 mg/kg estimated 18934.6973 mg/kg estimated
Calcium Carbonate (CAS 471-34-1)	Oral LD50	Mouse Rat	6450 mg/kg 6450 mg/kg

\*Estimates for product may be based on additional component data not shown.

**Skin Corrosion/Irritation** : Causes irritation.

**Serious Eye Damage/Eye Irritation** : Irritating to eyes.

#### Respiratory or Skin Sensitization

**Respiratory Sensitization** : Not available.

**Skin Sensitization** : Irritating to skin.

**Germ Cell Mutagenicity** : No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** : This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA

#### IARC Monographs. Overall Evaluation of Carcinogenicity

ASPHALT (CAS 8052-42-4) 2B Possibly carcinogenic to humans.

QUARTZ (CAS 14808-60-7) 1 Carcinogenic to humans.

#### US. National Toxicology Program (NTP) Report on Carcinogens

QUARTZ (CAS 14808-60-7) Known To Be Human Carcinogen.

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

Not listed.

**Reproductive Toxicity** : Contains no ingredient listed as toxic to reproduction.

**Specific Target Organ Toxicity** : Not available.

#### - Single Exposure

**Specific Target Organ Toxicity** : Not available.

#### - Repeated Exposure

**Aspiration Hazard** : Not available.

**Chronic Effects** : Prolonged inhalation may be harmful. May cause eczema-like skin disorders. (dermatitis).

## Section 12. Ecological Information

**Ecotoxicity** : This product has no known ecotoxicological effects.  
Not expected to be harmful to aquatic organisms.

**Aquatic Toxicity**

Components	Test	Species	Test Results
Calcium Carbonate (CAS 471-34-1)	LC50	Fish/Western Mosquitofish (Gambusia affinis)	> 56000 mg/l, 96 hours

\*Estimates for product may be based on additional component data not shown.

**Persistence and Degradability** : Not available.

**Bioaccumulative Potential** : Not available.

**Mobility in Soil** : Not available.

**Other Adverse Effects** : Not available.

## Section 13. Disposal Considerations

**Disposal Instructions** : Dispose of contents/container in accordance with local/regional/national/international regulations.  
When this product as supplied is to be discarded as waste, it does not meet the definition of a RCRA waste under 40 CFR 261.

**Hazardous Waste Code** : Not applicable.

**Waste from Residues/  
Unused Products** : Dispose of in accordance with local regulations.

**Contaminated Packaging** : Offer rinsed packaging material to local recycling facilities.

## Section 14. Transport Information

**DOT** : Not regulated as dangerous goods.

**IATA** : Not regulated as dangerous goods.

**IMDG** : Not regulated as dangerous goods.

**Transport in Bulk According  
to Annex II of MARPOL 73/78  
and the IBC Code** : Not available.

**Further Information** : If the product is shipped at ambient temperature, not regulated for transport by ground, air or vessel. If shipped above 212 deg F: "UN3257, Elevated Temperature Liquid, n.o.s. (Asphalt mixture), 9, PG III".



## Section 15. Regulatory Information

### US FEDERAL REGULATIONS

**Note:** : All components are on the U.S. EPA TSCA Inventory List.

**TSCA Section 12(b)  
Export Notification  
(40 CFR 707, Subpt. D)** : Not regulated.

**CERCLA Hazardous  
Substance List  
(40 CFR 302.4)** : Not listed.

**US. OSHA Specifically  
Regulated Substances  
(29 CFR 1910.1001-1050)** : Not listed.

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

**Hazard Categories** : Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely  
Hazardous Substance** : Not listed.

**SARA 311/312  
Hazardous Chemical** : No

**SARA 313 (TRI Reporting)** : Not regulated.

#### Other Federal Regulations

**Clean Air Act (CAA)  
Sect. 112 Hazardous  
Air Pollutants (HAPs) List** : Not regulated.

**Clean Air Act (CAA) Sect.  
112(r) Accidental Release  
Prevention (40 CFR 68.130)** : Not regulated.

**Safe Drinking Water Act  
(SDWA)** : Not regulated.

### US STATE REGULATIONS

**Note:** : **WARNING:** This product contains a chemical known to the State of California to cause cancer.

**US. Massachusetts RTK - Substance List**  
ASPHALT (CAS 8052-42-4)  
CALCIUM CARBONATE (CAS 471-34-1)  
QUARTZ (CAS 14808-60-7)

**US. New Jersey Worker and Community Right-to-Know Act**  
Not regulated.



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## Section 15. Regulatory Information *cont'd.*

### US STATE REGULATIONS *cont'd.*

#### US. Pennsylvania RTK - Hazardous Substances

ASPHALT (CAS 8052-42-4)  
 CALCIUM CARBONATE (CAS 471-34-1)  
 QUARTZ (CAS 14808-60-7)

US. Rhode Island RTK : Not regulated.

#### US. California Proposition 65

##### US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

ASPHALT (CAS 8052-42-4) Listed: January 1, 1990  
 QUARTZ (CAS 14808-60-7) Listed: October 1, 1988

### INTERNATIONAL INVENTORIES

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## Section 16. Other Information

**Date of Issue** : 10/31/2016

**Further Information** : HMIS® is a registered trade and service mark of the NPCA.

**References** : ACGIH  
 EPA: ACQUIRE database  
 US. IARC Monographs on Occupational Exposures to Chemical Agents  
 HSDB® - Hazardous Substances Data Bank  
 IARC Monographs. Overall Evaluation of Carcinogenicity



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**Section 16. Other Information** *cont'd.***References** *cont'd.*

: National Toxicology Program (NTP) Report on Carcinogens  
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

**Notice**

: The information in the sheet was written based on the best knowledge and experience currently available. 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.