

Material Name: SBS Self-Adhering Membranes

Safety Data Sheet ID: 3132

# **Section 1 - Product and Company Identification**

Hazard Label Not Required Company Information

Johns Manville Roofing Systems P.O. Box 5108

Denver, CO 80127 USA

Telephone: 303-978-2000 8:00AM-5:00PM M-F

Internet Address: http://www.jm.com

Emergency: 800-424-9300 (Chemtrec, In English)

#### **Trade Names:**

Dibiten™ SAS Base; Dibiten™ SAS Cap; DynaGrip® Base 250 SD/SA; DynaGrip® Base P/SA; DynaGrip® Base SA/SA; DynaGrip® Base SD/SA; DynaGrip® Cap Self-Adhering Membrane; DynaLastic® 180 QuickLap™; JM BaseGrip SD/SA JM Ice & Water Guard™;

JMCleanBond™ Base Flashing; JMCleanBond™ Cap Flashing; JMCleanBond™ SBS Cap & Base; JMCleanBond™ Utility Sheet; Sure Grip™ Self-Adhering Membrane

# **Section 2 - Hazards Identification**

### **Emergency Overview**

Under normal conditions of use and handling, this product is not expected to create any health or safety hazards.

#### Inhalation

Not expected under normal conditions of use. However, irritation of the upper respiratory tract (scratchy throat), coughing, and congestion may occur in extreme exposures.

#### Skin

Not expected under normal conditions of use.

### Ingestion

This product is not intended to be ingested (eaten). If ingested, it may cause temporary irritation to the gastrointestinal (digestive) tract.

### **Eyes**

Not expected under normal conditions of use.

# Section 3 - Composition/Information on Ingredients

CAS#	Component	Percent
8052-42-4	Asphalt	45-67
9003-55-8	Styrene-Butadiene polymer	2-40
12007-56-6	Calcium Borate (Colemanite)	9-29*
Not Available	Roof granules	0-15**
Not Available	Continuous Glass Filament Mat (see JM MSDS #1013)	0-15***
1317-65-3	Calcium Carbonate	1-12
Not Available	Polyester Mat (see JM MSDS #2200)	0-10***
Not Available	Rubber-Based Adhesive	0-10
64742-52-5	Petroleum Distillates, Hydrotreated Heavy Naphthenic	0-8***
64742-46-7	Petroleum Distillates, Hydrotreated Middle 0-8****	
14808-60-7	Crystalline Silica (Quartz)	0-10****

### **Component Information**

- \*A component of .JMCleanBond™ SBS Cap & Base, .JMCleanBond™ Base Flashing, .JMCleanBond™ Cap Flashing, & .JMCleanBond™ Utility Sheet.
- \*\*Roof granules are on top surface of "cap" and Dynalastic membranes only; granules are composed of ceramic-coated granite, which contains 35% crystalline silica. Airborne crystalline silica not expected to be released; is encapsulated in relatively large (non-respirable) particles that are adhered to product surface.
- \*\*\*These roofing membranes are reinforced with mats composed of either continuous filament fiber glass or polyester.
- \*\*\*\*Component of .JMCleanBond™ Base Flashing, .JMCleanBond™ Cap Flashing, .JMCleanBond™SBS Base, & .JMCleanBond™ Utility Sheet.
- \*\*\*\*\*Low levels of respirable crystalline silica may be present in sand backing on DynaGrip® SD membranes.

 Material Name: SBS Self-Adhering Membranes Safety Data Sheet ID: 3132

Under normal conditions of use and handling, this product is not expected to create any health or safety hazards. Processing of this product can result in formation of vapors or fumes that may be irritating to eyes, skin, & respiratory system.

### **General Product Description**

Black pliable solid; rubber or slight acrylic odor.

# Section 4 - First Aid Measures

First Aid: Inhalation

Remove to fresh air. If symptoms persist contact a physician.

First Aid: Skin

Wash exposed skin with soap and water. If irritation develops or persists, seek medical attention.

First Aid: Ingestion

Product is not intended to be ingested or eaten. If this product is ingested, do not induce vomiting and seek medical attention immediately.

First Aid: Eyes

Flush eyes with large amounts of water until irritation subsides. If irritation persists, seek medical attention.

# **Section 5 - Fire Fighting Measures**

Flash Point: Not applicable Method Used: Not applicable

Upper Flammable Limit (UFL): Not determined

Auto Ignition: Not determined

Flammability Classification: Not determined

Rate of Burning: Not determined

**General Fire Hazards** 

There is no potential for spontaneous fire or explosion.

### Fire Fighting Equipment/Instructions

No special procedures are expected to be necessary for this product. Normal fire fighting procedures should be followed to avoid inhalation of smoke and gases.

### Section 6 - Accidental Release Measures

### Clean-Up Procedures

Pick up large pieces. Vacuum dusts.

# Section 7 - Handling and Storage

#### **Handling Procedures**

Use protective equipment as described in Section 8 of this safety data sheet when handling uncontained material. Handle in accordance with good industrial hygiene and safety practices.

#### **Storage Procedures**

Warehouse storage should be in accordance with package directions, if any. Material should be kept clean, dry, and in original packaging.

# **Section 8 - Exposure Controls / Personal Protection**

The Occupational Safety and Health Administration (OSHA) has not adopted specific occupational exposure standards for fiber glass. Fiber glass is treated as a nuisance dust and is regulated by OSHA as a particulate not otherwise regulated (total dust) shown in CFR 1910.1000 Table Z-3.

Respirable fraction 5 mg/m3

Total dust 15 mg/m3

JM has adopted the fiber glass industry voluntary Product Stewardship Program (PSP), formerly the NAIMA-OSHA Health and Safety Partnership Program (HSPP). Under the PSP, JM recommends that exposures be limited to the voluntary concentration of 1 f/cc TWA for fibers longer than 5 microns with a diameter less than 3 microns. This will help minimize potential irritation effects. The PSP also includes the PPE recommendations described below.

### Asphalt (8052-42-4)

ACGIH: 0.5 mg/m3 TWA (fume, inhalable fraction, as benzene soluble aerosol)

### Calcium Carbonate (1317-65-3)

OSHA: 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

Page 2 of 7 | Janua Pate: 04/22/2012 | Payinian: 1 0116

Page 2 of 7 Issue Date: 04/22/2013 Revision: 1.0116

Material Name: SBS Self-Adhering Membranes Safety Data Sheet ID: 3132

Crystalline Silica (Quartz) (14808-60-7)

ACGIH: 0.025 mg/m3 TWA (respirable fraction)

PERSONAL PROTECTIVE EQUIPMENT
Personal Protective Equipment: Eyes/Face

Safety glasses with side shields or chemical goggles are recommended.

Personal Protective Equipment: Skin

Leather or cotton gloves should be worn to protect against mechanical abrasion.

**Personal Protective Equipment: Respiratory** 

None required

**Personal Protective Equipment: General** 

Protective equipment should be provided as necessary to prevent irritation of the throat, eyes, and skin, and to keep exposures below the applicable exposure limits identified in Section 8.

# Section 9 - Physical & Chemical Properties

Appearance: Black pliable Odor: Rubber odor or slight acrylic odor

**Physical State:** solid pH: Not applicable Vapor Pressure: Not applicable Vapor Density: Not applicable **Boiling Point: Melting Point:** Not determined Not determined Solubility (H<sub>2</sub>O): Specific Gravity: Insoluble Not determined Freezing Point: Not determined **Solids Content** Not applicable **Evaporation Rate:** Not applicable Not applicable Viscosity: Percent Volatile: VOC: Not determined

# Section 10 - Stability & Reactivity Information

#### Stability

These products are not reactive.

### **Hazardous Decomposition**

May form carbon dioxide and carbon monoxide.

### **Hazardous Polymerization**

Will not occur.

# **Section 11 - Toxicological Information**

### **Acute Toxicity**

### **A: General Product Information**

Vapors from this product may cause eye, respiratory and skin irritation,

### B: Component Analysis - LD50/LC50

Asphalt (8052-42-4)

Oral LD50 Rat: >5000 mg/kg; Dermal LD50 Rabbit:>2000 mg/kg

#### Calcium Borate (Colemanite) (12007-56-6)

Oral LD50 Rat: 5600 mg/kg

#### Petroleum Distillates, Hydrotreated Middle (64742-46-7)

Inhalation LC50 Rat: 4.6 mg/L/4H; Oral LD50 Rat: 7400 mg/kg; Dermal LD50 Rabbit: >2000 mg/kg

### Petroleum Distillates, Hydrotreated Heavy Naphthenic (64742-52-5)

Inhalation LC50 Rat: 2.18 mg/L/4H; Oral LD50 Rat: >5000 mg/kg; Dermal LD50 Rabbit: >2000 mg/kg

#### Crystalline Silica (Quartz) (14808-60-7)

Oral LD50 Rat: 500 mg/kg

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**Material Name: SBS Self-Adhering Membranes** Safety Data Sheet ID: 3132

### **Component Carcinogenicity**

Asphalt (8052-42-4)

ACGIH: A4 - Not Classifiable as a Human Carcinogen (coal-tar free)

IARC: Group 3 - Not Classifiable (IARC Supplement 7 [1987], Monograph 35 [1985] (steam-refined

cracking-residue and air-refined))

Styrene-Butadiene polymer (9003-55-8)

IARC: Group 3 - Not Classifiable (IARC Supplement 7 [1987], Monograph 19 [1979])

Continuous Glass Filament Mat (see JM MSDS #1013)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Group 3 - Not Classifiable (IARC Monograph 81 [2002] (listed under Man-made mineral fibres),

Monograph 43 [1988])

Crystalline Silica (Quartz) (14808-60-7)

ACGIH: A2 - Suspected Human Carcinogen

Known Human Carcinogen (Select Carcinogen)

IARC: Group 1 - Known Human Carcinogen (IARC Monograph 68 [1997] (listed under Crystalline silica

inhaled in the form of quartz or cristobalite from occupational sources))

#### **Chronic Toxicity**

Asphalt (asphalt CAS # 8052-42-4 and oxidized asphalt 64742-93-4; bitumens); In 1985/87, IARC (International Agency for Research on Cancer) concluded the following: (a) Bitumens are not classifiable as to their carcinogenicity to humans (Group 3). (b) Extracts of steam- and air-refined bitumens are possibly carcinogenic to humans (Group 2B). IARC found that evidence for carcinogenicity from animal studies was: inadequate for undiluted air-refined bitumens; limited for steam-refined and cracking-residue bitumens; sufficient for extracts of steam-refined and air-refined bitumen. IARC found that human evidence for carcinogenicity of asphalt fumes was inadequate. Studies of roofers indicated an excess of cancers; however, IARC concluded that, since roofers may be exposed also to coal-tar pitches and other materials, "the excess cancer risk cannot be attributed specifically to bitumens." In 1994, a published review of 20 epidemiology studies of asphalt workers and roofers agreed with IARC, that current human evidence is inadequate for the carcinogenicity of asphalt fumes in humans. Trace amounts of polynuclear aromatic hydrocarbons (PAHs) may be present in some asphalts and can be released upon excessive heating, which results in thermal cracking of the asphalt compounds. Some of these PAHs have been identified as having the potential to induce carcinogenic and reproductive health effects.

Continuous Filament Glass Fiber: No chronic health effects are known to be associated with exposure to continuous filament fiber glass. Results from epidemiologic studies have not shown any increases in respiratory disease or cancer. The International Agency for Research on Cancer (IARC) has classified continuous filament fiber glass as a Group 3 substance, not classifiable as to its carcinogenicity to humans. Because of the large diameter of continuous filament fibers, these products are not considered respirable.

Crystalline silica is considered a hazard by inhalation. The International Agency for Research on Cancer (IARC) has classified crystalline silica as a Group 1 substance, carcinogenic to humans. This classification is based on the findings of laboratory animal studies (inhalation and implantation) and epidemiology studies that were considered sufficient for carcinogenicity. Several studies have been conducted to determine the risk of cancer to workers exposed to dusts which contain crystalline silica. However, these studies did not consider other factors or elements that workers may be exposed to. Therefore, the causes of the excess deaths due to cancer could not be precisely determined. Further studies are being conducted to determine the risk of cancer when working with crystalline silica products. Excessive exposure to crystalline silica can cause silicosis, a non-cancerous lung disease.

# **Section 12 - Ecological Information**

### **Ecotoxicity**

A: General Product Information

No data available for this product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Petroleum Distillates. Hydrotreated Middle (64742-46-7)

96 Hr LC50 Pimephales promelas: 35 mg/L [flow-through]

Page 4 of 7 Issue Date: 04/22/2013 Revision: 1.0116 Material Name: SBS Self-Adhering Membranes Safety Data Sheet ID: 3132

### Petroleum Distillates, Hydrotreated Heavy Naphthenic (64742-52-5)

96 Hr LC50 Pimephales promelas: >5000 mg/L 48 Hr EC50 Daphnia magna: >1000 mg/L

# **Section 13 - Disposal Considerations**

### **US EPA Waste Number & Descriptions**

### **A: General Product Information**

This product is not expected to be a hazardous waste when it is disposed of according to the U.S. Environmental Protection Agency (EPA) under Resource Conservation and Recovery Act (RCRA) regulations. Product characterization after use is recommended to ensure proper disposal under federal and/or state requirements.

### **B: Component Waste Numbers**

No EPA Waste Numbers are applicable for this product's components.

### **Disposal Instructions**

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

# Section 14 - Transport Information

### **International Transport Regulations**

These products are not classified as dangerous goods according to international transport regulations.

# Section 15 - Regulatory Information

### **US Federal Regulations**

### **A: General Product Information**

SARA 311/312: This product is not classified as hazardous under SARA 311/312.

#### **B: Component Analysis**

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

#### **State Regulations**

# A: General Product Information

The glass fibers in this product are not known to be regulated.

Other state regulations may apply. Check individual state requirements.

Asphalt fumes may contain trace amounts of the following California Proposition 65 Listed Substances as known to the state of California to cause cancer or reproductive effects: Poly nuclear aromatic hydrocarbons (benz(a)anthracene, benzo(b)fluoranthene, benzo(b)fluoranthene, benzo(b)fluoranthene, benzo(b)fluoranthene, benzo(c)apyrene).

#### B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS#	CA	FL	MA	MN	NJ	PA
Asphalt	8052-42-4	Yes	No	Yes	Yes	Yes	Yes
Calcium Carbonate	1317-65-3	No	No	Yes	Yes	No	Yes
Crystalline Silica (Quartz)	14808-60-7	No	No	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains a chemical known to the state of California to cause cancer.

Component	CAS#
Crystalline Silica (Quartz)	14808-60-7

### **Other Regulatory Information**

# **A: General Product Information**

Calcium Carbonate (1317-65-3) and Calcium Borate (12007-56-6) are listed on the Canada Non-Domestic Substances List (NDSL).

#### **B: TSCA Status**

This product and its components are listed on the TSCA 8(b) inventory.

None of the components listed in this product are listed on the TSCA Export Notification 12(b) list.

 Material Name: SBS Self-Adhering Membranes **Safety Data Sheet** ID: 3132

### **International Regulations**

### **A: General Product Information**

These products are considered articles under both U.S. and international product regulations and as such, these products do not require registration or notification on the various country-specific inventories.

### **B: Component Analysis - WHMIS IDL**

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS#	Minimum Concentration
Continuous Glass Filament Mat (see JM MSDS #1013)	Not Available	1 % (related to Fibrous glass)
Crystalline Silica (Quartz)	14808-60-7	1 %

### **WHMIS Classification**

This is not a WHMIS controlled product. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations. This SDS contains all the information required by the Controlled Products Regulations.

# **Section 16 - Other Information**

### Other Information

Prepared for: Johns Manville Roofing Systems P. O. Box 5108

Denver, CO USA 80217-5108

Prepared by: Johns Manville Technical Center P.O. Box 625005 Littleton, CO USA 80162-5005

The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Date	MSDS #	Reason
08/01/00	3132-1.0000	New MSDS authoring system.
10/30/00	3132-1.0001	Sect. 1 added 'Home Defender™'; LOLI update, minor.
08/08/01	3132-1.0100	Sect 1-Add trade names DynaGrip™ Cap; DynaGrip® Base
		SD/SA; DynaGrip® Base SA/SD; Dyna-Grip® Base SA/SA
08/16/01	3132-1.0101	Section 1 - editorial change
11/11/02	3132-1.0102	Sect. 1: added DynaLastic® 180 QuicklLap™. Sect. 2 updated
		composition. Sect. 11 update for asphalt IARC Group 3
		classification. Misc. edits.
07/07/03	3132-1.0103	Sect. 1: Deleted Nordshield, Home Defender, Roof Defender;
		added Dibiten™ SAS Cap and Dibiten™ SAS Base.
01/15/04	3132-1.0104	Sect. 1 add DynaGrip® Base FR SA/SA; Sect. 2 edit composition.
		Regulatory review. Minor updates.
2/23/04	3132-1.0105	Sect.1 add DynaGrip® FR
05/10/04	3132-1.0106	Regulatory update. Minor edits.
05/21/04	3132-1.0107	Sect.1 Removed trade name DynaGrip Base FR SA/SA and replaced it with JM CleanBond SBS™.
06/08/04	3132-1.0108	Sect. 1 Removed trade name DynaGrip FR and made minor edits to trade names.
08/20/04	3132-1.0109	Sect. 1 trade name adjustment: .JMCleanBond SBS Cap and Base. Minor edits throughout.
09/16/04	3132-1.0110	Sect. 1 addition of trade names .JMCleanBond Base Flashing, .JMCleanBond Cap Flashing, and .JM Ice and Water Guard. Sect.
02/21/05	2122 1 0114	2 adjustment of composition.
03/31/05	3132-1.0111	Sect. 1 addition of trade name .JMCleanBond™ Utility Sheet.

Issue Date: 04/22/2013 Revision: 1.0116

# Material Name: SBS Self-Adhering Membranes

Safety Data Sheet ID: 3132

06/05/06	3132-1.0112	Section 2 granule, mat, and silica composition edits to more
06/21/07	3132-1.0113	accurate ranges. Addition of DynaGrip 250 SD/SA to trade names. Minor edits
05/09/08	3132-1.0114	throughout.  Removed DynaGrip Base SA/SD from trade names. Updated SDS to GHS format.
05/28/08 04/22/13	3132-1.0115 3132.10116	Addition of DynaGrip® Base P/SA to trade names. Addition of JM BaseGrip SD/SA trade names.

End of Sheet 3132