

Section 1 - Product and Company Identification

Product Name
Generic Name
Formula
Chemical Name:
Hazard Label Not Required
Company Information

Johns Manville
Roofing Systems Group
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 SA/SA; DynaGrip® Base SA/SD; DynaGrip® Base SD/SA; DynaGrip® Base 250 SD/SA; DynaGrip® Cap Self-Adhering Membrane; DynaLastic® 180 QuickLap™; .JMCleanBond™ Base Flashing; .JMCleanBond™ Cap Flashing; .JMCleanBond™ SBS Cap & Base; .JMCleanBond™ Utility Sheet; JM Ice & Water Guard™; Sure Grip™ Self-Adhering Membrane

Section 2 - 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 Applicable	Continuous Glass Filament Mat (see JM MSDS #1013)	0-15***
1317-65-3	Calcium Carbonate	1-12
Not Available	Rubber-Based Adhesive	0-10
Not Available	Polyester Mat (see JM MSDS #2200)	0-10***
64742-46-7	Petroleum Distillates, Hydrotreated Middle	0-8****
64742-52-5	Petroleum Distillates, Hydrotreated Heavy Naphthenic	0-8****
14808-60-7	Crystalline Silica (Quartz)	0-10*****

Component Related Regulatory Information

Glass filaments, Fibrous glass.

* 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. Respirable crystalline silica from sand is not expected to be released; sand is adhered to product and is >99.9% too large to become airborne or to be respirable.

Section 3 - Hazards Identification

Emergency Overview Emergency Overview

APPEARANCE AND ODOR: Black pliable solid; rubber or slight acrylic odor.

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

During cutting of this product, nuisance dust can be generated. Personal protective equipment as described in Section 8 can be used to protect against possible temporary irritation of skin, eyes, and respiratory tract.

Potential Health Effects

Inhalation

None expected. However, irritation of the upper respiratory tract (scratchy throat), coughing, and congestion may occur in extreme exposures.

Skin

Temporary irritation may occur.

Ingestion

Ingestion of this product is unlikely. However, ingestion of product may produce gastrointestinal irritation and disturbances.

Eyes

Asphalt fumes may cause temporary irritation of the eyes.

Primary Routes of Entry (Exposure)

Skin

Target Organs

Skin

Medical Conditions Aggravated by Exposure

Pre-existing chronic skin diseases.

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. Do not eat or drink while working with this product.

First Aid: Ingestion

Product is not intended to be ingested or eaten. If this product is ingested, severe irritation of the gastrointestinal (GI) tract may occur, and should be treated symptomatically. Seek medical attention.

First Aid: Eyes

Not applicable

First Aid: Notes to Physician

This product is not expected to produce any chronic health effects from acute exposures. Treatment should be directed toward removing the source of irritation with symptomatic treatment as necessary.

Section 5 - Fire Fighting Measures

Flash Point: Not applicable

Upper Flammable Limit (UFL): Not determined

Auto Ignition: 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.

Method Used: Not applicable

Lower Flammable Limit (LFL): Not determined

Flammability Classification: Not determined

Section 6 - Accidental Release Measures

Clean-Up Procedures

Pick up large pieces. Vacuum dust.

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

Exposure Guidelines

A: General Product Information

Protective equipment should be provided as necessary to prevent excessive skin contact. Wash hands and other exposed areas before eating or using the restroom.

B: Component Exposure Limits

Asphalt (8052-42-4)

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

Continuous Glass Filament Mat (see JM MSDS #1013) (Not Applicable)

ACGIH: 1 fiber/cm³ TWA (respirable fibers, length >5 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination); 5 mg/m³ TWA (inhalable fraction)

Calcium Carbonate (1317-65-3)

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

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

ACGIH: 0.025 mg/m³ TWA (respirable fraction)

OSHA: 0.1 mg/m³ TWA (respirable dust)

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Safety glasses with side shields are recommended.

Personal Protective Equipment: Skin

Leather or cotton gloves should be worn to prevent skin contact and irritation.

Personal Protective Equipment: Respiratory

Not required

Ventilation

No special ventilation systems are required under normal conditions of use.

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: Not determined	Melting Point: Not determined
Solubility (H₂O): Insoluble	Specific Gravity: Not determined
Freezing Point: Not determined	Solids Content: Not applicable
Evaporation Rate: Not applicable	Viscosity: Not applicable
Percent Volatile: 0	VOC: Not determined

Section 10 - Stability & Reactivity Information

Stability

This is a stable material. This product is not reactive.

Hazardous Decomposition

Carbon monoxide, carbon dioxide and miscellaneous hydrocarbons.

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

Acute Toxicity

A: General Product Information

Skin contact may result in slight irritation and possible allergic reactions due to soft rubber products. Fumes from this product may cause transitory irritation to eyes and upper respiratory passages.

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

Carcinogenicity

Component Carcinogenicity

Asphalt (8052-42-4)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

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

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) (Not Applicable)

ACGIH: A4 - Not Classifiable as a Human Carcinogen (related to Continuous filament glass fibers)

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

NTP: Known 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

Note: Due to the product form, exposures to hazardous dusts or fumes are not expected to occur. Exposure limits are given for reference only. No chronic health effects are expected from the normal use of this product.

Respirable crystalline silica from sand is not expected to be released; sand is adhered to product and is >99.9% too large to become airborne or to be 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.

The asphalt in this product exists in a solid state and does not impart any special hazard to the mixture.

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.

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]

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**

Test waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of a hazardous waste. If you are unsure of the regulations, contact your local Public Health Department, or the local office of the EPA.

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 - Transportation Information**International Transportation 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**

Other state regulations may apply. Check individual state requirements.

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
Continuous Glass Filament Mat (see JM MSDS #1013) (¹ related to Glass, fibrous or dust) (² related to Fibrous glass)	Not Applicable	Yes ¹	No	Yes ²	Yes	Yes ²	Yes ²
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.

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.

C: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS
Asphalt	8052-42-4	Yes	Yes	Yes
Styrene-Butadiene polymer	9003-55-8	Yes	Yes	No
Calcium Borate (Colemanite)	12007-56-6	Yes	No	Yes
Continuous Glass Filament Mat (see JM MSDS #1013)	Not Applicable	Yes	Yes	Yes
Calcium Carbonate	1317-65-3	Yes	No	Yes
Petroleum Distillates, Hydrotreated Middle	64742-46-7	Yes	Yes	Yes
Petroleum Distillates, Hydrotreated Heavy Naphthenic	64742-52-5	Yes	Yes	Yes
Crystalline Silica (Quartz)	14808-60-7	Yes	Yes	Yes

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 Applicable	1 % (related to Fibrous glass)
Crystalline Silica (Quartz)	14808-60-7	1 %

Section 16 - Other Information**Other Information**

Prepared for:
Johns Manville
Roofing Systems Group
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 QuickLap™. 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. 2 adjustment of composition.
03/31/05	3132-1.0111	Sect. 1 addition of trade name .JMCleanBond™ Utility Sheet.
06/05/06	3132-1.0112	Section 2 granule, mat, and silica composition edits to more accurate ranges.
06/21/07	3132-1.0113	Addition of DynaGrip 250 SD/SA to trade names. Minor edits throughout.

This is the end of MSDS # 3132