

SECTION 1 IDENTIFICATION

Product Name	Derbilume FR
Recommended Use	Waterproofing membrane for low-sloped roofs
Restrictions	Contact Manufacturer
Manufacturer	DERBIGUM Americas, Inc
Address	4821 Chelsea Avenue Kansas City, MO 64130
Phone Number	(800) 727-9872
Emergency Number	(800) 424-9300 (CHEMTREC)

SECTION 2 HAZARDS

GHS Classification Specific Target Organ Toxicity, Repeated Exposure: Hazard Category 1

Hazard Pictographs



Signal Word

DANGER

Hazard Statements

H372 - Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from open flames. - NO SMOKING
P260 - Do not breathe fume, gas, vapors
P264 - Wash hands, forearms and face thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P273 - Avoid release into the environment
P280 - Wear protective gloves and clothing

Response

P301+P310 - If swallowed: Immediately call a Poison Center or doctor/physician.
Do not induce vomiting. Collect Spillage.
P303+P361+P353 - If on skin (or hair), Take off immediately all contaminated clothing. Rinse skin with water/shower
P303+P340 - If inhaled, remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313 - If exposed or concerned, get medical advice/attention
P314 - Get medical advice/attention if you feel unwell
P370+P378 - In case of fire: Use carbon dioxide (CO₂), foam, dry extinguishing powder to extinguish

Storage

P403+P235 - Store in well-ventilated place. Keep cool

Disposal

P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste

OTHER HAZARDS
OSHA HCS 2012

Under United States Regulations (29 CFR 1910.1200), this product is considered hazardous.

ABBREVIATION KEY

SECTION 3 COMPOSITION

Chemical Composition: Mixture

COMPONENT	CAS NUMBER	PERCENT BY WEIGHT
Petroleum Asphalt	8052-42-4	30 - 70
Styrene butadiene Copolymer	9003-07-0	0 - 15
Calcium Carbonate	471-34-1	0 - 60
Fiberglass Mat	Not Established	5 - 23
Aluminium (solid foil)	7429-90-5	5 - 25
Polyethylene film	9002-88-4	5 - 25
Sand Dusting	14808-60-7	7 - 13
Dry Talc Dusting	14807-96-6	7 - 13

Note: The above components and their percentages are provided for health and safety purposes, ONLY. This document should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

SECTION 4 FIRST AID MEASURES

Eyes	If foreign matter enters eyes, immediately flush with large amounts of potable water for at least 15 minutes or until irritation subsides. Get medical attention if irritation persists.
Skin	Remove contaminated clothing and wash with soap and water.
Inhalation	Remove affected person from source of exposure. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, give oxygen. Get medical attention.
First-Aid, Ingestion	Consult a physician if unusual reaction is noted. Product is not intended nor is it likely to be ingested or eaten.
Symptoms, Acute & Delayed Immediate Medical Attention	<i>Refer to Section 11 - Toxicological Information</i> All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials

SECTION 5 FIRE FIGHTING MEASURES

Flash Point	No data available
Hazardous Products of Combustions	Carbon dioxide, carbon monoxide and partially burned carbon
Extinguishing Media	Foam CO ₂ or dry chemical extinguishers.
Firefighting instruction	Burning of this product will produce thick black smoke.
Explosion Hazard	None
Protection Gear	Firefighters should wear full face, self contained breathing apparatus and impervious protective clothing to avoid smoke inhalation and lack of oxygen.

ABBREVIATION KEY

ASTM = American Society for Testing and Materials (International)
UEL = Upper Explosion Limit

LEL = Lower Explosion Limit

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions	No special precautions should be necessary if material is used under ordinary conditions and as recommended.
Emergency Procedures	No emergency procedures should be necessary if material is used under ordinary conditions as recommended.
Environmental Precautions	Avoid run off to waterways and sewers.
Method and Materials for Containment & Clean Up	Pick up large pieces. Vacuum dust. If sweeping is necessary, use a dust suppressant such as water. These procedures will help to minimize potential exposures. Scoop up material and put into a suitable container for disposal as a nonhazardous waste.

SECTION 7 HANDLING AND STORAGE

Handling	Use this product with adequate ventilation. Avoid breathing dusts or fumes generated from cutting or heating this material. Always wash work clothes separately from other clothing. Wash thoroughly after handling. Use personal protective equipment as described in Section 8.
Storage	Store indoors in a cool, dry, well-ventilated area. Do not handle or store near an open flame, heat or other sources of ignition. This product will react with strong oxidizing agents, reducing agents, strong acids and alkali

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational Exposure Limits

COMPONENT	CAS NUMBER	OSHA PEL	ACGIH TLV	NIOSH REL
Asphalt	8052-42-4	Not Established	0.5 mg/m ³ TWA (respirable)	5 mg/m ³ Ceiling (fume, 15 min)
Talc	14807-96-6	2 mg/m ³ TWA	2 mg/m ³ TWA (respirable)	2 mg/m ³ TWA
Calcium Carbonate	1317-65-3	5 mg/m ³ (respirable) 15 mg/m ³ (total dust)	3 mg/m ³ (respirable) 10 mg/m ³ TWA	5 mg/m ³ (respirable) 10 mg/m ³ (total dust)
Aluminium foil	7429-90-5	5 mg/m ³ (respirable) 15 mg/m ³ (total dust)	10 mg/m ³ TWA 20 mg/m ³ Ceiling	5 mg/m ³ (respirable) 10 mg/m ³ (total dust)
Fiberglass Mat	65997-17-3	1 f/cc*	1-f/cc* TWA for fibers <=3µm DIA; and <5µm L	5 mg/m ³ for fibers <=3.5µm DIA; and >=10µm L
Silica, crystalline	14808-60-7	0.1 mg/m ³ TWA (respirable)	0.025 mg/m ³ TWA (respirable)	0.05 mg/m ³ TWA (respirable)

*Fibers per cubic centimeter

Engineering Measures/ Controls	Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.
General Industrial Hygiene	Use good industrial hygiene practices in handling this material.
Environmental Exposure Controls	Follow best practice for site management and disposal of waste.

ABBREVIATION KEY

NIOSH = National Institute for Occupational Safety
 OSHA = Occupational Safety & Health Administration
 ACGIH = American Conference of Governmental Industrial Hygiene

PEL = Permissible Exposure Level
 TLV = Threshold Limit Value
 TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

Pictographs



Eyes/Face

Safety glasses with side shields

Follow the national guidelines concerning the use of protective eye wear.

Hand

Protective Gloves

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

Skin/Body

Normal work clothing (long sleeved shirts, long pants and smooth bottom work shoes) is recommended.

Inhalation

Use NIOSH or MSHA approved respiratory protective equipment when airborne exposure limits are exceeded.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Black with aluminum surface
Odor	Slight asphalt odor
Odor Threshold	No data available
pH	No data available
Relative Evaporation Rate	No data available
Boiling Point	No data available
Freezing Point	No data available
Flash Point	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Specific Gravity (H₂O =1)	No data available
Vapor pressure	No data available
Vapor Density (AIR=1)	No data available
Solubility in Water	NIL

SECTION 10 STABILITY AND REACTIVITY

Stability	Stable at room temperature in closed containers under advised storage and handling conditions.
Reactivity	Upon combustion CO and CO ₂ are formed
Conditions to Avoid	Strong oxidizers, no spark or open flame, direct sunlight and high temperatures
Hazardous Decomposition	Carbon monoxide, carbon dioxide, hydrogen sulfide and sulfur dioxide
Hazardous Polymerization	Will not occur

SECTION 11 TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

Eyes

- Acute (Immediate)** Not expected to present a hazard to the eyes. Mechanical irritation may occur in contact with particles.
- Chronic (Delayed)** No data available

Skin

- Acute (Immediate)** Mechanical abrasion may occur in contact with skin. Thermal burns when handled at elevated temperatures.
- Chronic (Delayed)** No data available

Inhalation

- Acute (Immediate)** For Torch-on applications, inhalation of fumes may result in irritation, especially if the product is over heated above recommended temperatures.
- Chronic (Delayed)** This product contains crystalline silica which is listed by IARC as a suspect carcinogen. Silicosis (pulmonary fibrosis or severe lung scarring) may occur if exposed to high levels or repeated encounters with dust. Exposure to airborne particles that exceed the limits listed may cause lung cancer. This product also contains petroleum asphalt. If heated, there is limited evidence that derivatives of asphalt fumes may cause carcinogenic effects in animals. There is inadequate evidence to support that asphalt fumes alone are carcinogenic to humans.

Ingestion

- Acute (Immediate)** Product is not intended nor is it likely to be ingested or eaten.
- Chronic (Delayed)** No data available

Component Analysis

COMPONENT	CAS NUMBER	ORAL LD50 (mg/kg)	DERMAL LD50 (mg/kg)	INHALATION LC50 (mg/m³)
Asphalt	8052-42-4	>5,000 (rat)	>2,000 (rabbit)	> 94.4 (rat)
Crystalline silica	14808-60-7	500 (rat)	N/A	> 1 (rat)
Calcium Carbonate	1317-65-3	6,450 (rat)	N/A	> 250 (rat)
Polyethylene film		N/A	N/A	> 12 (rat)g/m³

Component Carcinogenicity

- Asphalt (8052-42-4)
IARC: Group 2B - Possible Carcinogen
- Calcium Carbonate (1317-65-3)
IARC: Group 2B - Possible Carcinogen
- Crystalline silica (14808-60-7)
IARC: Group 1 - Known Human Carcinogen (IARC Monograph 68 [1997])
ACGIH: A2 - Suspected Human Carcinogen
NTP: Known Human Carcinogen

Mutagenicity

Based on available data, the classification criteria are not met.

STOT Single Exposure

Based on available data, the classification criteria are not met.

STOT Repeated Exposure

OSHA HCS 2012 ▪ STOT RE Hazard Category 1

ABBREVIATION KEY

IARC = International Agency for Research on Cancer
NTP = National Toxicology Program
ACGIH = American Conference of Governmental Industrial Hygiene

LD50 = Lethal dose, 50 percent
LC50 = Lethal concentration, 50 Percent
STOT = Specific Target Organ Toxicity

SECTION 11 TOXICOLOGICAL INFORMATION

Carcinogenic Effects

When used under normal conditions, this product is not considered a carcinogen. Based upon the newly published IARC classifications for bitumen/asphalt fumes, it has been determined that there is inadequate evidence to support that asphalt fumes alone are carcinogenic to humans.

This product contains crystalline silica which is listed by IARC as a suspect carcinogen. Silicosis (pulmonary fibrosis or severe lung scarring) may occur if exposed to high levels or repeated encounters with dust. Exposure to airborne particles that exceed the limits listed may cause lung cancer.

Continuous Filament Glass Fiber: No chronic health effects are known to be associated with exposure to continuous filament fiberglass. Results from epidemiologic studies have not shown any increases in respiratory disease or cancer. The 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

General

Employ best management practices to prevent this material from entering storm sewer systems, waterways or otherwise impacting plant and animal species.

Component Analysis

No data available

Environmental Transport

No data available

Environment Degradation

No data available

Soil Absorption/Mobility

No data available

Other Information

This product has not been tested. Based on information related to all raw materials in the finished product it is not expected to harm ecosystems through its applied use.

SECTION 13 DISPOSAL CONSIDERATIONS

Product Waste

The transportation, storage, treatment and dispose of this waste must be conducted in accordance with all applicable federal, state and local regulations.

Packaging Waste

The transportation, storage, treatment and dispose of this waste must be conducted in accordance with all applicable federal, state and local regulations.

SECTION 14 TRANSPORT INFORMATION

Transportation Regulations

This product is not regulated as a hazardous material in transportation.

National Motor Freight Classification (NMFC)

Class 55

SECTION 15 REGULATORY INFORMATION

TSCA Inventory	Components are listed
DSL Inventory	Components are listed
WHMIS Classification	Controlled Product Classification: D2A, based on the IARC classification of crystalline silica and Calcium Carbonate
Sara 313	Aluminum foil (CAS #7429-90-5)
Sara 311/312 Categories	Acute Health Hazard; Chronic Health Hazard
CERCLA	None present
CA Proposition 65	Petroleum Asphalt (CAS #8052-42-4); Silica, crystalline (CAS #14808-60-7) WARNING: This product contains a chemicals known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov
IRCA	Petroleum Asphalt (CAS #8052-42-4); Silica, crystalline (CAS #14808-60-7) Calcium Carbonate (CAS #1317-65-3)
NIOSH	Petroleum Asphalt (CAS #8052-42-4); Silica, crystalline (CAS #14808-60-7)

Right to Know States

COMPONENT	CAS NUMBER	CA	MA	MN	NJ	PA	RI
Asphalt	8052-42-4	Yes	Yes	Yes	Yes	Yes	Yes
Talc	14807-96-6	Yes	Yes	Yes	Yes	Yes	Yes
Calcium Carbonate	1317-65-3	No	Yes	Yes	Yes	Yes	Yes
Aluminium foil	7429-90-5	Yes	Yes	Yes	Yes	Yes	Yes
Fiberglass Mat	65997-17-3	Yes	Yes	Yes	Yes	Yes	Yes
Silica, crystalline	14808-60-7	Yes	Yes	Yes	Yes	Yes	Yes

SECTION 16 OTHER INFORMATION

Preparation Date	May 2019
Summary of Changes	New Product
Disclaimer	<p>The information and recommendations contained herein are to the best of DERBIGUM Americas' knowledge and belief, accurate and reliable as of the date issued. DERBIGUM Americas does not warrant or guarantee their accuracy or reliability, and DERBIGUM Americas shall not be liable for any loss or damage arising out of the use thereof.</p> <p>The information and recommendations are offered for the users consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use. It is also the users responsibility to make certain that it is relying upon the most recent, updated, information and recommendations available from DERBIGUM Americas.</p>

ABBREVIATION KEY

TSCA = Toxic Substances Control Act	DSL = Domestic Substances List (Canada)
WHMIS = Workplace Hazardous Materials Information System (Canada)	CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act
IARC = International Agency for Research on Cancer	NIOSH = National Institute for Occupational Safety
GHS = Global Harmonized System	HMIS = Hazardous Material Identification System
NFPA = National Fire Protection Agency	