Modified Bitumen Roll Roofing Membrane
Safety Data Sheet

Section 1 - Product and Company Identification

Manufacturer:

Siplast, Inc.
14911 Quorum Drive, Ste. 600
Dallas, TX 75254

Telephone: 800-922-8800
Website: www.siplast.com
CHEMTREC: 800-424-9300

Trade Names:

Paratech 180 Base 3.0
Paratech 180 Base
Paratech 180 Base TG
Paratech 180 Cap
Paratech 180 Cap FR
Paratech 180 Cap FR TG
Paratech 180 Cap TG
Paratech 250 Base
Paratech 250 Base TG
Paratech 250 Cap
Paratech 250 Cap FR
Paratech 250 Cap FR TG
Paratech 250 Cap TG
Paratech Glass Base 3.0 TG
Paratech Glass Base
Paratech Glass Base TG
Paratech Glass Cap FR
Paratech Glass Cap FR TG
Paratech Glass SA
Paratech Glass Base SA 2.5

Use: These products are designed for use in roofing systems where two or more plies of modified bitumen are desired.

Section 2 - Hazards Identification

As defined in the OSHA Hazard Communication Standard, 29 CFR 1910.1200, the products listed below are considered articles and do not require an SDS. In addition, articles are not included in the scope of the Globally Harmonization System (GHS). As such, the GHS labeling elements are not included on this SDS. All components listed for this product are bound within the product. When handled as intended and under normal conditions of use, there is no evidence that any of the ingredients are released in amounts that pose a significant health risk. Although these products are not subject to the OSHA Standard or GHS labeling elements, Siplast would like to disclose as much health and safety information as possible to ensure that this product is handled and used properly. This SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and be made available for employees and other users of this product. In addition, the recommendations for handling and use of these products should be included in worker training programs.

ADDITIONAL HAZARD IDENTIFICATION INFORMATION:

PRIMARY ROUTE OF EXPOSURE: Occasional nuisance dust, Inhalation

SIGNS & SYMPTOMS OF EXPOSURE

EYES: May cause irritation to the eyes.

SKIN: May cause irritation to the skin.

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

INHALATION: May cause irritation to the respiratory tract.

ACUTE HEALTH HAZARDS: NIOSH has found that studies of workers exposed to asphalt fumes have repeatedly found irritation of the serous membranes of the conjunctivae (eye irritation) and the mucous membranes of the upper respiratory tract (nasal and throat irritation).

CHRONIC HEALTH HAZARDS:

Studies in humans have found that exposure to respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. Silicosis is a serious and irreversible disease; it may be progressive even after exposure has ceased; it can lead to disability and death. Human studies also have found that silicosis is a risk factor for tuberculosis, and that occupational exposure to respirable crystalline silica is associated with chronic obstructive pulmonary disease, including bronchitis and emphysema. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica.

CARCINOGENICITY:

NIOSH has concluded that the collective data from human, animal, genotoxicity and exposure studies provide sufficient evidence that roofing asphalt fumes are a potential occupational carcinogen.

Occupational exposure to respirable crystalline silica is classified as a known carcinogen in humans. IARC has determined that respirable crystalline silica is carcinogenic to humans (Group 1), based on findings of sufficient evidence of carcinogenicity in both humans and experimental animals. NTP has classified respirable crystalline silica as a known human carcinogen based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between occupational exposure to respirable crystalline silica and increased lung cancer rates. NIOSH has determined that respirable crystalline silica is a potential occupational carcinogen.

Section 3 - Composition/Information on Ingredients

CAS #	Component	Percent
8052-42-4	Asphalt	20-60
Not Available	Mineral granules (Ceramic-coated granite; 35% crystalline silica, non-respirable)	0-35
1317-65-3	Calcium carbonate	0-35
12007-56-6	Calcium borate (Colemanite) (Products with FR suffix contain colemanite for fire resistance)	0-35
16389-88-1	Dolomite (CaMg(CO3)2)	0-35
9003-55-8	Styrene-Butadiene polymer	4-10
25038-59-9	Polyester fiber	2-10
Not Available	Glass fiber mat	2-10
Not Available	Continuous filament glass fiber	2-10
Not Available	Glass fiber mat with polyester scrim	2-10
Not Available	Polyester mat	2-10
Not Available	Polyester mat with glass scrim	2-10
14808-60-7	Crystalline silica (sand) (adhered to product and is >99.9% too large to become airborne or to be respirable)	0-35
9002-88-4	Polypropylene or Polyolefin Film	0-6
64742-11-6	Extracts, petroleum, heavy naphthenic	>1
64741-53-3	Distillates, petroleum, heavy naphthenic	>1

Component Information

None.

General Product Description

These products consist of a modified bitumen sheet incorporating the features of a fiber glass mat and/or polyester composite mat with a blend of SBS (Styrene-Butadiene-Styrene) rubber and high quality asphalt. Product may also contain fire retardant additives.

Paratech cap sheet products are mineral surfaced, asphalt coated, fiber glass cap sheets for use in built-up roofing systems.

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: > 500ºF
Upper Flammable Limit (UFL): Not determined
Auto Ignition: 460ºC/860ºF
Rate of Burning: Not determined

Method Used: COC
Lower Flammable Limit (LFL): Not determined
Flammability Classification: Not determined

General Fire Hazards

There is no potential for spontaneous fire or explosion.

Extinguishing Media

Carbon dioxide (CO_2), dry chemical.

Fire Fighting Equipment/Instructions

No special procedures are expected to be necessary for this product. Normal firefighting 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

Exposure Guidelines

A: General Product Information

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/m^3
Total dust 15 mg/m^3

B: Component Exposure Limits

Asphalt (8052-42-4)

ACGIH: 0.5 mg/m³TWA (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)

Crystalline silica (sand) (adhered to product and is >99.9% too large to become airborne or to be respirable) (14808- 60-7)

OSHA: 0.1 mg/m³ TWA (respirable dust)
((250)/(%SiO2 + 5) mppcf TWA (respirable)); ((10)/(%SiO2 + 2) mg/m³ TWA (respirable));
((30)/(%SiO2 + 2) mg/m³ TWA (total dust))

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:	Dark mat with granule or white coated surface	**Odor:**	Asphalt odor
Physical State:	solid	**pH:**	Not applicable
Vapor Pressure:	Not applicable	**Vapor Density:**	Not applicable
Boiling Point:	>370ºC/>700ºF	**Melting Point:**	>95ºC/>200ºF
Solubility (H_2O):	Nil	**Specific Gravity:**	Variable
Freezing Point:	Not determined	**Evaporation Rate:**	Not applicable
Viscosity:	Not applicable	**Percent Volatile:**	0
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) (Products with FR suffix contain colemanite for fire resistance) (12007-56-6)
Oral LD50 Rat: 5600 mg/kg

Crystalline silica (sand) (adhered to product and is >99.9% too large to become airborne or to be respirable) (14808- 60-7)
Oral LD50 Rat: 500 mg/kg

Polypropylene or Polyolefin Film (9002-88-4)
Inhalation LC50 Mouse: 12 g/m3/30M

Distillates, petroleum, heavy naphthenic (64741-53-3)
Oral LD50 Rat: >5000 mg/kg; Dermal LD50 Rabbit:>2000 mg/kg

Extracts, petroleum, heavy naphthenic (64742-11-6)
Oral LD50 Rat: >5000 mg/kg; Dermal LD50 Rabbit:>2000 mg/kg

Component Carcinogenicity

Asphalt (8052-42-4)
ACGIH: A4 - Not Classifiable as a Human Carcinogen (fume, 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 filament glass fiber (Not Available)
ACGIH: A4 - Not Classifiable as a Human Carcinogen (listed under Synthetic Vitreous Fibers)
IARC: Group 3 - Not Classifiable (IARC Monograph 81 [2002] (listed under Man-made mineral fibres), Monograph 43 [1988]))

Crystalline silica (sand) (adhered to product and is >99.9% too large to become airborne or to be respirable) (14808- 60-7)
ACGIH: A2 - Suspected Human Carcinogen
NTP: 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))

Polypropylene or Polyolefin Film (9002-88-4)
IARC: Group 3 - Not Classifiable (IARC Supplement 7 [1987], Monograph 19 [1979])

Chronic Toxicity

Asphalt (asphalt CAS # 8052-42-4): 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).

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

Extracts, petroleum, heavy naphthenic (64742-11-6)

48 Hr EC50 Daphnia magna: 1.4 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 Status. The following SARA 311 designations apply to this product: Immediate (acute) health hazard.

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/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.

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	Yes	Yes
Crystalline silica (sand) (adhered to product and is >99.9% too large to become airborne or to be respirable)	14808-60-7	No	No	Yes	Yes	Yes	Yes
Distillates, petroleum, heavy naphthenic	64741-53-3	No	No	Yes	No	No	No
Extracts, petroleum, heavy naphthenic	64742-11-6	No	No	Yes	No	No	No

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

cancer.

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(j)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene).

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.

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 filament glass fiber	Not available	1% (related to Fibrous glass)
Crystalline silica (sand) (adhered to product and is >99.9% too large to become airborne or to be respirable)	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

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.