

SAFETY DATA SHEET

Section 1. Identification

GHS product identifier :
Document product code :
Other means of identification : Not available.
Product type : Solid.

Relevant identified uses of the substance or mixture and uses advised against

Identified uses :

Supplier/Manufacturer :

Emergency telephone number (with hours of operation) :

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Other means of identification : Not available.

Ingredient name	%	CAS number
Asphalt, oxidized	0 - 40	64742-93-4
Asphalt	0 - 35	8052-42-4
Distillates (petroleum), hydrotreated heavy naphthenic	0 - 15	64742-52-5
Calcium carbonate	0 - 30	471-34-1
Crystalline silica, respirable powder	8 - 12	14808-60-7
Colemanite	3.5 - 7.5	1318-33-8
Benzene, ethenyl-, polymer with 1,3-butadiene	0 - 7.5	9003-55-8
Ethene, homopolymer	0 - 6.3	9002-88-4
Talc	2.1 - 3.9	14807-96-6
Glass, oxide, chemicals	0.1 - 1.4	65997-17-3

A proportion of crystalline silica can be present in the sand sprinkled on the top of some membranes. The crystalline silica contained in the sand is not likely to be found in the ambient air in concentrations above the limit of exposure since the sand adheres to the surface of the membrane.

The exposure to colemanite above the limits of exposure is not likely to occur considering its form (incorporated in the mixture) and/or the provided use. The limit of exposure is given for reference only.

United States: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

Canada: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with the amended HPR as of April 2018.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Flush eyes with water for at least 15 minutes while holding eyelids open. Do not attempt to remove material from affected area without medical assistance. Obtain immediate medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Remove victim from contaminated place and restore breathing, if required. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Get medical attention if symptoms occur. SKIN CONTACT: In the event of contact with the product melted, do not try to remove the product of the affected area and rinse the area affected in cold water. Obtain immediate medical attention. At the end of each working day, clean all the parts of the body which came into contact with asphalt fumes. Clean the clothing contaminated by the asphalt fumes.
- Ingestion** : The ingestion of this product is not very likely to occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : EYE CONTACT: The product is not likely to cause effects to the eyes. If the membrane is torch-applied, asphalt fumes can be emitted of the product and cause irritations, redness and conjunctivitis to the eyes. The contact with this product at high temperature can cause thermal burns.



Section 4. First aid measures

- Inhalation** : INHALATION: The product is not likely to cause effects on the respiratory system. If the membrane is torch-applied, asphalt fumes can be emitted of the product and cause irritations to the nose, the throat and the respiratory tracts, tiredness, headaches, dizziness, nausea and insomnia.
- Skin contact** : SKIN CONTACT: The product can cause a mechanical irritation of the skin because of its rough surface. If the membrane is torch-applied, asphalt fumes can cause skin irritation. The asphalt fumes can cause an irritation of the skin. The contact with this product at high temperature can cause thermal burns.
- Ingestion** : INGESTION: Exposure is not likely to occur by this route of entry under normal use of the product.

Over-exposure signs/symptoms

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Foam, CO₂, sand, chemical powder.
- Unsuitable extinguishing media** : None known.

Specific hazards arising from the chemical : Torch, used to weld waterproofing membranes, can produce temperatures beyond 1 100°C (2 000°F). Avoid all contact with materials sensitive to these temperatures, as lead or plastic materials. Never work in an enclosed area where vapors can accumulate. Shield air conditioning units and other protrusions on the roof with perlite panels or similar material when using the torch around them.

- Hazardous thermal decomposition products** : Burning of this material will produce thick black smoke. Irritating and/or toxic gases including Hydrogen Sulphide and Sulphur Dioxide, traces of metallic fumes may be generated by thermal decomposition or combustion.
- Never use torch (es):
- When substrate(s) have been recently covered by solvent-based products (wait until it is dry).
 - Near any combustible materials.
 - Close to containers containing flammable liquids or materials (keep open flame at least 3 m [10'] away).
 - Directly on combustible substrate or insulation.
- Voids, holes or gaps in substrate or located near the welding zone can be protected against flame penetration. Particular precautions must be taken to keep combustible or heat sensitive insulation away from the torch flame. If wood fibre panels must be



Section 5. Fire-fighting measures

installed, use fireproof panels. Avoid presence of combustible materials near open flame. At all times and especially when leaving job site, make sure that there is no smouldering or concealed fire. In that case, strictly follow the safety measures. Job planning must allow for employee presence on the roof at least one hour after torch application. At the end of every day, use a heat detector gun to discover any unusually hot surfaces. Always have one ABC fire extinguisher on hand, filled and in perfect working order near each torch.

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Spill** : The material can spill only when it's hot. Move rolls from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Hot asphalt is used to apply many of these products; appropriate personal protective equipment should be worn handling this material.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : The materials must be protected adequately and stored permanently away from flames or welding sparks, protected from bad weather and any harmful substances. Store self-adhesive membranes away from the sun.

Section 8. Exposure controls/personal protection

Control parameters

United States

Occupational exposure limits

Ingredient name	Exposure limits
Asphalt	<p>NIOSH REL (United States, 10/2016). CEIL: 5 mg/m³ 15 minutes. Form: Fertilizer and/or industrial use.</p> <p>ACGIH TLV (United States, 3/2017). TWA: 0.5 mg/m³, (as benzene soluble aerosol) 8 hours. Form: Inhalable fraction</p>
Distillates (petroleum), hydrotreated heavy naphthenic	<p>ACGIH TLV (United States, 3/2017). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction</p> <p>OSHA PEL (United States, 6/2016). TWA: 5 mg/m³ 8 hours.</p>
Crystalline silica, respirable powder	<p>NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist</p> <p>OSHA PEL Z3 (United States, 6/2016). TWA: 250 mppcf / (%SiO₂+5) 8 hours. Form: Respirable TWA: 10 mg/m³ / (%SiO₂+2) 8 hours. Form: Respirable</p> <p>NIOSH REL (United States, 10/2016). TWA: 0.05 mg/m³ 10 hours. Form: Respirable dust</p> <p>OSHA PEL (United States, 6/2016). TWA: 50 µg/m³ 8 hours. Form: Respirable dust</p> <p>ACGIH TLV (United States, 3/2017). TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction</p>
Colemanite	None.

Canada

Occupational exposure limits

Ingredient name	Exposure limits
Asphalt	<p>CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 5 mg/m³ 8 hours. Form: Fertilizer and/or industrial use.</p> <p>CA Quebec Provincial (Canada, 1/2014). TWA_{EV}: 5 mg/m³ 8 hours. Form: Fertilizer and/or industrial use.</p> <p>CA Ontario Provincial (Canada, 1/2018). TWA: 0.5 mg/m³, (as benzene soluble aerosol) 8 hours. Form: Inhalable fraction</p> <p>CA British Columbia Provincial (Canada, 6/2017). TWA: 0.5 mg/m³, (as benzene-soluble aerosol) 8 hours. Form: Inhalable fume</p> <p>CA Saskatchewan Provincial (Canada, 7/2013). STEL: 1.5 mg/m³, (measured as benzene soluble aerosol) 15 minutes. Form: Inhalable fume TWA: 0.5 mg/m³, (measured as benzene soluble aerosol) 8 hours. Form: Inhalable fume</p>
Distillates (petroleum), hydrotreated heavy naphthenic	<p>CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 5 mg/m³ 8 hours. Form: Mist 15 min OEL: 10 mg/m³ 15 minutes. Form: Mist</p> <p>CA Quebec Provincial (Canada, 1/2014). TWA_{EV}: 5 mg/m³ 8 hours. Form: Mist STEV: 10 mg/m³ 15 minutes. Form: Mist</p>
Crystalline silica, respirable powder	<p>CA British Columbia Provincial (Canada, 6/2017). TWA: 0.025 mg/m³ 8 hours. Form: Respirable</p> <p>CA Quebec Provincial (Canada, 1/2014). TWA_{EV}: 0.1 mg/m³ 8 hours. Form: Respirable dust</p> <p>CA Ontario Provincial (Canada, 1/2018). TWA: 0.1 mg/m³ 8 hours. Form: Respirable fraction</p> <p>CA Saskatchewan Provincial (Canada, 7/2013). TWA: 0.05 mg/m³ 8 hours. Form: Respirable fraction</p> <p>CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 0.025 mg/m³ 8 hours. Form: Respirable particulate.</p>

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.



Section 8. Exposure controls/personal protection

- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Solid. [Membrane.]
- Color** : Variable.
- Odor** : Asphalt.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not applicable.
- Boiling point** : Not applicable.
- Flash point** : Not applicable.
- Evaporation rate** : Not applicable.
- Flammability (solid, gas)** : Not applicable.
- Lower and upper explosive (flammable) limits** : Not applicable.
- Vapor pressure** : Not applicable.
- Vapor density** : Not applicable.
- Relative density** : Variable.
- Solubility** : None.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not applicable.



Section 9. Physical and chemical properties

Decomposition temperature : Not available.
Viscosity : Not applicable.
Flow time (ISO 2431) : Not available.
VOC = Volatile Organic Compound :

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid excessive heat.

Incompatible materials : Acid and strong basis and organic solvents and greasy substances.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Asphalt	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), hydrotreated heavy naphthenic	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

There is no data available.

Sensitization

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

Classification

Product/ingredient name	OSHA	IARC	NTP
Asphalt	-	2B	-
Crystalline silica, respirable powder	-	1	Known to be a human carcinogen.

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Section 11. Toxicological information

Specific target organ toxicity (single exposure)

Name	Category	Target organs
Colemanite	Category 1	lungs

Specific target organ toxicity (repeated exposure)

Name	Category	Target organs
Crystalline silica, respirable powder	Category 1	respiratory tract

Aspiration hazard

Name	Result
Distillates (petroleum), hydrotreated heavy naphthenic	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

- Eye contact** : EYE CONTACT: The product is not likely to cause effects to the eyes. If the membrane is torch-applied, asphalt fumes can be emitted of the product and cause irritations, redness and conjunctivitis to the eyes. The contact with this product at high temperature can cause thermal burns.
- Inhalation** : INHALATION: The product is not likely to cause effects on the respiratory system. If the membrane is torch-applied, asphalt fumes can be emitted of the product and cause irritations to the nose, the throat and the respiratory tracts, tiredness, headaches, dizziness, nausea and insomnia.
- Skin contact** : SKIN CONTACT: The product can cause a mechanical irritation of the skin because of its rough surface. If the membrane is torch-applied, asphalt fumes can cause skin irritation. The asphalt fumes can cause an irritation of the skin. The contact with this product at high temperature can cause thermal burns.
- Ingestion** : INGESTION: Exposure is not likely to occur by this route of entry under normal use of the product.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Long term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Potential chronic health effects

- General** : No known significant effects or critical hazards.

Section 11. Toxicological information

- Carcinogenicity** : Due to the product form, exposure to hazardous dusts or fumes is not expected to occur. Information on carcinogenicity is given for reference only. This product is not classifiable as a carcinogen. Bitumen: Asphalt fumes may contain a variety of polycyclic aromatic hydrocarbons (PAH), some of which are associated with the potential of inducing skin cancer. Increasing amounts of PAH may be released if this product is heated above 200°C. Prolonged or repeated contact of PAH with skin may cause skin cancer where poor personal hygiene may be a contributing factor. Asphalt fumes contain substances such as Benzo(a)pyrene and Dibenzo(a,h)anthracene that are known to cause cancer in humans. In its 2013 monograph (Volume 103), the International Agency for Research on Cancer (IARC) conducted a review of the potential carcinogenicity of bitumen (the European term for asphalt). One of its conclusions was that the "occupational exposures to straight-run bitumens and their emissions during road paving are possibly carcinogenic to humans (group 2B)". (1)
Oxidized bitumen: In its 2013 monograph (Volume 103), IARC conducted a review of the potential carcinogenicity of bitumen (the European term for asphalt). One of its conclusions was "occupational exposures to oxidized bitumens and their emissions during roofing are classified in IARC Group 2A, probably carcinogenic to humans". However, due to the product form, exposure to such component is unlikely under normal conditions of use. (2)
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.



Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

AERG : Not applicable

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
United States inventory (TSCA 8b): Not determined.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed



Section 15. Regulatory information

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

Name	Classification
Asphalt Distillates (petroleum), hydrotreated heavy naphthenic Crystalline silica, respirable powder	CARCINOGENICITY - Category 2 ASPIRATION HAZARD - Category 1 CARCINOGENICITY - Category 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory tract) (inhalation) - Category 1
Colemanite	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION (Fertility) - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (lungs) (inhalation) - Category 1

SARA 313

There is no data available.

State regulations

- Massachusetts** : The following components are listed: Asphalt; Distillates (petroleum), hydrotreated heavy naphthenic; Crystalline silica, respirable powder; Talc; Glass, oxide, chemicals
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: Asphalt; Crystalline silica, respirable powder; Talc
- Pennsylvania** : The following components are listed: Asphalt; Crystalline silica, respirable powder; Talc
- California Prop. 65**

⚠ WARNING: This product can expose you to Crystalline silica, respirable powder, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

A proportion of crystalline silica can be present in the sand sprinkled on the top of some membranes. The crystalline silica contained in the sand is not likely to be found in the ambient air in concentrations above the limit of exposure since the sand adheres to the surface of the membrane.

The exposure to colemanite above the limits of exposure is not likely to occur considering its form (incorporated in the mixture) and/or the provided use. The limit of exposure is given for reference only.

Canada

Canadian lists

- Canadian NPRI** : None of the components are listed.
- CEPA Toxic substances** : None of the components are listed.
- Canada inventory (DSL NDSL)** : Not determined.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Not classified.	

History

Date of issue mm/dd/yyyy : 02/15/2019
Date of previous issue : Not applicable
Version : 1
Prepared by : KMK Regulatory Services Inc.

Notice to reader

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