

Elevation™ S60

Asphalt Waterproofing Sheet Membrane

1. PRODUCT DATA

Date of Preparation: September 18, 2017

Product Name: Elevation™ S60

Producer: Formulated Materials, 5600 N. May Ave.,
Oklahoma City, OK 73112

Telephone: 1-844-405-3676

24-Hour Emergency Contact: CHEMTREC 1-800-424-9300

2. HAZARDS IDENTIFICATION

Danger!



Hot molten material can cause burns. If burned by hot product, cool immediately with water. Get medical attention for extensive burns. **DO NOT** try to remove the solidified material. See section 4.

When heated, this material may vent toxic levels of hydrogen sulfide (H₂S) vapors that accumulate in the vapor spaces of storage and transport compartments. H₂S vapors can cause eye, skin, and respiratory tract irritation and asphyxiation.

Potential Harmful Effects: Hot material can be unpleasant and may cause nausea, headache, and respiratory irritation. Hydrogen sulfide (H₂S) gas can be present in the vapor space of storage tanks and bulk transport compartments (see sections 7, 8, & 11). H₂S concentrations of 700-1000 ppm can be extremely hazardous or fatal.

Skin contact: Hot product causes severe burns. Contact with unheated material may cause mild skin irritation.

Eye contact: Hot product causes severe burns. Vapors and fumes from hot material may cause eye irritation.

Ingestion: Hot product causes severe burns. Ingestion of unheated material may cause irritation.

GHS Precautions

R36/37/38 Irritating to eyes, respiratory system and skin.

S36/39 Wear suitable protective clothing and eye/face protection.

3. COMPOSITION

Components	CAS #	Weight %
Asphalt	8052-42-4	80-100
Gilsonite	12002-43-6	0-20
Polymer	9003-55-8	0-20
Limestone	1317-65-3	0-15
Petroleum Hydrocarbon	64742-52-5	0-20

Asphalt products can contain trace amounts of hydrogen sulfide as a contaminant. This is not an intentional ingredient and will not be released unless the product is molten.

4. FIRST AID MEASURES

Eye Contact: Flush immediately with plenty of water while holding eyelids open. Seek medical attention.

Skin Contact: If the hot material gets on skin, quickly cool in water. Get medical attention for extensive burns. **DO NOT** try to peel the solidified material from the skin or use solvents or thinners to dissolve it. The use of vegetable oil or mineral oil is recommended for removal of this material from the skin.

Inhalation: If signs or symptoms described in this SDS arise, move the person to fresh air. If breathing has stopped, apply artificial respiration and get medical attention.

Ingestion: Not a typical concern, seek medical attention immediately.

5. FIRE FIGHTING MEASURES

Flammability: May ignite and burn at temperatures exceeding the flash point.

Flash Point (C.O.C.): 287°C (550°F) Minimum

Dust Explosivity Limits: Not Applicable

Extinguishing Media: Carbon dioxide (CO₂), dry chemical, foam or water spray (fog).

Fire Fighting Procedures: Avoid using straight water streams. Water spray and foam must be applied carefully to avoid frothing and from as far a distance as possible. Avoid excessive water spray application. Minimize breathing vapors, gases or fumes of decomposition products. Use supplied-air breathing equipment for enclosed or confined spaces.

Unusual Fire Hazards: When heated above flash point, material will release flammable vapors which can burn or be explosive in confined spaces if ignited. Vapor or gas may spread to distant ignition sources (pilot lights, welding equipment, electrical equipment, etc.) and flash back. Vapors may accumulate in low areas. Do not mix with strong oxidants such as liquid chlorine or concentrated oxygen.

6. ACCIDENTAL RELEASE MEASURES

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. Do not touch or walk through spilled material. Shut off leaks if possible without personal risks.

Eliminate sources of ignition. Add sand, dirt, or other suitable absorbent to spill area. If hot, allow to cool. Transfer to suitable containers. Avoid sparks or hot metal surfaces.

Keep product out of sewers and waterways by diking or impounding. Advise authorities if product has entered or may enter sewers or waterways. Assure conformity with applicable governmental regulations.

7. HANDLING AND STORAGE

Handling Procedures: Toxic quantities of hydrogen sulfide (H_2S) may be present in storage tanks and bulk transport vessels which contain or have contained this material. Persons opening or entering these compartments should first determine if H_2S is present. See Protective Equipment section. **DO NOT ATTEMPT RESCUE WITHOUT WEARING APPROVED SUPPLIED-AIR OR SELF-CONTAINED BREATHING EQUIPMENT.**

Use with adequate ventilation. Minimize breathing vapor, mist, and fumes. Avoid open flames. Use non-sparking tools.

Avoid prolonged and repeated contact with skin. Health Studies have shown that many petroleum hydrocarbons pose potential human health risks which vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized. Do NOT take internally. Never siphon by mouth.

Adhere to good hygienic practices. 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. Remove contaminated clothing and protective equipment before entering eating areas.

Storage Procedures: Store in accordance with local regulations, in a segregated and approved area. Keep in

the original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials. Do not store in unlabeled containers. Empty containers that retain product residue may be hazardous. Do not reuse container.

Store and use away from heat, sparks, open flame or any other ignition source. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.

Do not over heat. Prolonged overheating may cause damage to the polymer, rendering the product useless.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Provide ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the exposure limits indicated below. **An emergency eye wash station and safety shower should be located near the work-station.**

Exposure guidelines:

Hazardous Components	CAS #	OSHA PEL	ACGIH TLV-TWA	NIOSH REL Ceiling
Asphalt	8052-42-4	N.E.	*0.5 mg/m ³	*5 mg/m ³
Petroleum Hydrocarbon	64742-52-5	5 ppm	5 ppm	N.E.

Asphalt products can contain trace amounts of hydrogen sulfide as a contaminant. This is not an intentional ingredient and will not be released unless the product is molten.

* = Exposure guidelines for fumes from heating

N.E. = Not Established

PEL = Permissible Exposure Limits

OSHA = Occupational Safety and Health Administration

TLV = Threshold Limit Value

ACGIH = American Conference of Governmental Industrial Hygienists

TWA = Time Weighted Average

NIOSH = National Institute for Occupational Safety and Health

REL = Recommended Exposure Limits

Respiratory Protection: Use supplied-air respirator in confined areas or when vapors exceed TLV limits.

Ventilation:

Local Exhaust: In enclosed areas.

Mechanical: In enclosed areas.

Special: None

Other: None

Eye Protection: Safety glasses or face shield for hot material.

Protective Gloves: Insulated for hot material.

Other Protective Clothing Equipment: Long sleeves and impervious clothing to protect against splashed hot material.

Work/Hygienic Practices: See Section 7.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Black solid, cold.

Odor: Asphalt.

Vapor Pressure (mm Hg.) @ 20°C/68°F: < 0.1

Boiling Point (IBP Approx.): 482°C (900°F)

Melting Point (Ring & Ball): 37 - 121°C (100 - 250°F)

Solubility in water: Negligible

Specific Gravity (H₂O =1): 1.0 - 1.15

Evaporation Rate (Butyl Acetate =1) @ 25°C/77°F: < 0.01

Vapor Density (Air = 1): > 5

Flash Point (C.O.C.): 287°C (550°F) Min.

10. STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: Do not overheat product. Auto-ignition may occur if heated beyond 315°C (600°F).

Incompatibility (Materials to Avoid): May react with strong oxidizing materials.

Hazardous Decomposition or Byproducts: Combustion: carbon dioxide (CO₂), carbon monoxide (CO), sulfur oxides (SO_x), hydrogen sulfide (H₂S), smoke, fumes.

Hazardous Polymerization: Not expected to occur.

11. TOXICOLOGICAL INFORMATION

The cool solid material is not expected to cause eye and skin irritation, nor is it expected to have acute systemic toxicity by ingestion.

Asphalt fumes have been associated with irritation of eyes, nose, and throat.

Some asphalt contain sulfur compounds which may form hydrogen sulfide (H₂S) when heated. The rotten eggs odor of H₂S is unreliable as an indicator of concentration because it may be entirely masked by the odor of the asphalt. Signs and symptoms of overexposure to H₂S include respiratory tract irritation, headaches, dizziness, nausea, gastrointestinal disturbance, coughing, a sensation of dryness and pain in the nose, throat and chest, confusion and unconsciousness. H₂S concentrations of 700-1000 ppm can be extremely hazardous or fatal.

Carcinogenicity:

NTP: No

IARC Monograph: See below

OSHA Regulated: No

Additional Health Data: No association has been established between industrial exposure to petroleum asphalt and cancer in humans. The International Agency for Research on Cancer (IARC) has recently reviewed the carcinogenic potential of asphalts. They concluded that there was insufficient evidence that undiluted, air-refined asphalt was carcinogenic to animals, while there was only limited evidence that steam-refined asphalts were carcinogenic to animals. Additionally, there was insufficient evidence to conclude that asphalts were carcinogenic to human beings. Studies in which mice were exposed to a variety of whole asphalts did not result in any increased cancer rate; mice exposed to asphalts diluted with hydrocarbon solvents had increased incidence of certain types of cancer. Brief or intermittent skin contact with this asphalt product is not expected to produce any serious effects. While normal handling of this product is not likely to cause cancer in humans, skin contact and breathing of mists, fumes, or vapors should be reduced to a minimum. We strongly recommend that the precautions outlined in this SDS be followed when handling this material.

12. ECOLOGICAL INFORMATION

EPA Hazard Classification Code: Not Applicable

Ecotoxicity effects: Product can foul shoreline and damage plant life. This product is not expected to cause any acute or chronic toxicity to aquatic organisms due to its extremely low water solubility.

13. DISPOSAL CONSIDERATIONS

This material as supplied and by itself, when discarded or disposed of, is not an EPA RCRA hazardous waste according to federal regulations. *Dispose of in accordance with local, state and federal regulations.*

14. TRANSPORTATION INFORMATION

The Description shown may not apply to all shipping situations. Consult 49 CFR, or appropriate regulations, for additional description requirements.

Solid: Non Hazardous, Non Regulated

Hot Liquid:

Agency	Proper shipping Name	Label Information	Hazard Class	ID Number	Pkg Group
DOT	Asphalt	Elevated temperature material, liquid, n.o.s. (asphalt)	9 (Miscellaneous)	NA 3257	III

15. REGULATORY INFORMATION

SARA TITLE III: EPA Regulation 40 CFR 302 (CERCLA Section 102); CFR 355 (SARA Section 301-304); CFR 372 (SARA Section 313): NOT APPLICABLE.

SARA 311/312 HAZARD CATEGORIES: Fire Hazard, Acute Health Hazard, Chronic Health Hazard.

TOSCA, CANADIAN DSL: All components of this product are on the TOSCA and DSL inventories.

REACH (Registration, Evaluation and Authorization of Chemicals) status: All ingredients are pre-registered with REACH.

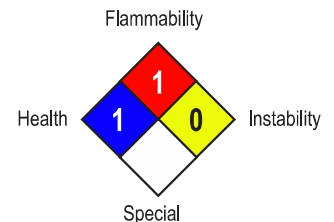
16. OTHER INFORMATION

Date of Preparation: September 18th, 2017

Revision Date: September 18th, 2017

Hazardous Material Information System (HMIS)

Health	1
Flammability	1
Physical Hazard	0
Personal Protection	<input type="checkbox"/>

National Fire Protection Association (NFPA)

HMIS & NFPA Hazard Rating Legend

* = CHRONIC HEALTH HAZARD
 0 = MINIMAL
 1 = SLIGHT
 2 = MODERATE
 3 = SERIOUS
 4 = SEVERE

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The information has been completed to the best of our knowledge and is believed to be accurate and reliable as from the date indicated. However, no warranty is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy oneself as to the suitability and completeness of such information for his own particular use.

The information contained herein is based on current knowledge and experience; no responsibility is accepted and that the information is sufficient or correct in all cases. Users should consider this data only as a supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customer, and the protection of the environment.