

**Section 1: IDENTIFICATION**

**Product Name:** ROOFING FLUX

**Synonyms:** 3PASP; Hard Flux; MJ100; Petroleum Hydrocarbon.

**Product Use:** Asphalt produced from the distillation of crude oil that is used specifically in the manufacture of roofing products.

**Restrictions on Use:** Not available.

**Manufacturer/Supplier:** Gibson Energy ULC  
1700, 440 – 2nd Ave. SW  
Calgary, Alberta  
T2P 5E9

**Phone Number:** (403) 206-4000

**Emergency Phone:** Canutec (613) 996-6666 or Cellular \*666

**Date of Preparation of SDS:** December 5, 2017

**Section 2: HAZARD(S) IDENTIFICATION****GHS INFORMATION**

**Classification:** Carcinogenicity, Category 2

**LABEL ELEMENTS**

**Hazard Pictogram(s):**



**Signal Word:** Danger

**Hazard Statements:** Suspected of causing cancer.

**Precautionary Statements**

**Prevention:** Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Wear protective gloves, protective clothing, eye protection and face protection.

**Response:** If exposed or concerned: Get medical advice/attention.

**Storage:** Store locked up.

**Disposal:** Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

**Hazards Not Otherwise Classified:** Hot product may cause thermal burns.

**Ingredients with Unknown Toxicity:** 97% of this product mixture consists of ingredient(s) of unknown acute toxicity.

This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200). This material is considered hazardous by the Hazardous Products Regulations.

**Section 3: COMPOSITION / INFORMATION ON INGREDIENTS**

Hazardous Ingredient(s)	Common name / Synonyms	CAS No.	% wt./wt.
Asphalt	Bitumen	8052-42-4	95 - 100
Sulfur	Not available.	7704-34-9	1 - 5

**Section 4: FIRST-AID MEASURES**

- Inhalation:** If inhaled: Call a poison center or doctor if you feel unwell.  
**Acute and delayed symptoms and effects:** May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.
- Eye Contact:** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.  
**Acute and delayed symptoms and effects:** May cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Hot liquid product may cause serious thermal burns on direct contact.
- Skin Contact:** If on skin (or hair): Get immediate medical advice/attention. Remove non-adhering contaminated clothing. Cool adherent materials and burned areas with ice and/or cold water. Do not remove adherent material or clothing. Do not use solvents to remove asphalt from the skin.  
**Acute and delayed symptoms and effects:** May cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching. Hot liquid product may cause serious thermal burns on direct contact. Asphalt fumes can increase susceptibility to sunburn.
- Ingestion:** If swallowed: Rinse mouth. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.  
**Acute and delayed symptoms and effects:** Hot product may cause thermal burns. Causes burns to nose, mouth, throat, and digestive tract. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea, blood in the feces and/or vomitus may also be seen. If swallowed in large quantities, Asphalt can obstruct the intestine.
- General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible). No attempt should be made to remove firmly adhering bitumen from the skin. Once the bitumen has cooled, it will do no further harm and in fact provides a sterile covering over a burnt area. As healing takes place, the bitumen plaque will detach itself, usually after a few days. If solvent treatment is used, it should be



followed by washing with soap and water, then the application of a proprietary refatting agent or skin cleansing cream. Only medically approved solvents may be used to remove bitumen from burns, as other solvents could cause further skin damage.

**Note to Physicians:** Symptoms may not appear immediately.

**Section 5: FIRE-FIGHTING MEASURES**

**FLAMMABILITY AND EXPLOSION INFORMATION**

Not flammable or combustible by OSHA/WHMIS criteria. Vapors may form explosive mixtures with air. Substance is transported hot. When heated, this material may evolve toxic and flammable Hydrogen sulphide.

If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

Fire involving Tanks or Car/Trailer Loads: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

**Sensitivity to Mechanical Impact:** This material is not sensitive to mechanical impact.

**Sensitivity to Static Discharge:** This material is sensitive to static discharge at temperatures at or above the flash point.

**MEANS OF EXTINCTION**

**Suitable Extinguishing Media:** Small Fire: Dry chemical, CO2, or regular foam.

Large Fire: Fog or regular foam. Move containers from fire area if you can do it without risk.

**Unsuitable Extinguishing Media:** Do not spray water onto burning product as this may cause spattering and spreading of the flame.

**Products of Combustion:** Oxides of carbon. Oxides of sulphur. Hydrogen sulphide.

**Protection of Firefighters:** Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

**Section 6: ACCIDENTAL RELEASE MEASURES**

**Emergency Procedures:** As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares,



- sparks or flames in immediate area).
- Personal Precautions:** Do not touch or walk through spilled material. Use personal protection recommended in Section 8.
- Environmental Precautions:** Keep out of drains, sewers, ditches, and waterways.
- Methods for Containment:** Stop leak if without risk. Contain hot liquid by dyking and allow to cool and solidify.
- Methods for Clean-Up:** Break up and recover. Scoop up into drums.
- Other Information:** See Section 13 for disposal considerations.

**Section 7: HANDLING AND STORAGE**

**Handling:**  
Do not swallow. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Grounding of containers/pouring equipment is necessary when transferring hot liquid product. See Section 8 for information on Personal Protective Equipment.

**Storage:**  
Store locked up. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children. Asphalt contains trace amounts of Hydrogen sulfide which can accumulate in vapour space of tanks and containers.

**Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Guidelines  
Component**

- Bitumen [CAS No. 8052-42-4]  
**ACGIH:** 0.5 mg/m<sup>3</sup> (TWA); A4; BEI; Inhalable fraction, as benzene-soluble; For Asphalt (Bitumen) fume, as benzene-soluble aerosol  
**OSHA:** No PEL established.
- Sulphur [CAS No. 7704-34-9]  
**ACGIH:** 10 mg/m<sup>3</sup> (TWA) (Inhalable.); 3 mg/m<sup>3</sup> (TWA) (Respirable.); For Particles (Insoluble or Poorly Soluble) Not Otherwise Specified  
**OSHA:** 15 mg/m<sup>3</sup> (Total dust) (TWA), 5 mg/m<sup>3</sup> (Respirable fraction) (TWA); For Particulates Not Otherwise Regulated (PNOR).

**PEL:** Permissible Exposure Limit  
**TWA:** Time-Weighted Average

**Engineering Controls:** Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits.



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### PERSONAL PROTECTIVE EQUIPMENT (PPE)



- Eye/Face Protection:** Wear chemical safety goggles. If product is hot, wear full face-shield. Use equipment for eye protection that meets the standards referenced by OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.
- Hand Protection:** Wear protective gloves. If product is hot, thermally protective gloves are recommended. Consult manufacturer specifications for further information.
- Skin and Body Protection:** Wear protective clothing. Clothing with full length sleeves and pants should be worn.
- Respiratory Protection:** If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator or self-contained breathing apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying respirators.
- General Hygiene Considerations:** Handle according to established industrial hygiene and safety practices.

### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Hot black, highly viscous semi-solid with characteristic tarry odor; semi-solid at room temperature.
<b>Colour:</b>	Black.
<b>Odour:</b>	Tarry.
<b>Odour Threshold:</b>	Not available.
<b>Physical State:</b>	Semi-solid at room temperature; viscous liquid when hot.
<b>pH:</b>	Not available.
<b>Melting Point / Freezing Point:</b>	Not available.
<b>Initial Boiling Point:</b>	Not available.
<b>Boiling Point:</b>	> 470 °C (878 °F) (1 atm)
<b>Flash Point:</b>	288 °C (550.4 °F) (minimum, depending on grade) (COC)
<b>Evaporation Rate:</b>	Not available.



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<b>Flammability (solid, gas):</b>	Not applicable.
<b>Lower Flammability Limit:</b>	Not available.
<b>Upper Flammability Limit:</b>	Not available.
<b>Vapor Pressure:</b>	Nil at 37.8 °C (100 °F)
<b>Vapor Density:</b>	Not available.
<b>Relative Density:</b>	Not available.
<b>Solubilities:</b>	Insoluble in water.
<b>Partition Coefficient: n-Octanol/Water:</b>	Not available.
<b>Auto-ignition Temperature:</b>	370 to 480 °C (698 to 896 °F)
<b>Decomposition Temperature:</b>	Not available.
<b>Viscosity:</b>	600 cSt (MJ100) to 1500 cSt (Hard Flux) at 100 °C (212 °F)
<b>Percent Volatile, wt. %:</b>	Not available.
<b>VOC content, wt. %:</b>	Not available.
<b>Density:</b>	1.018 to 1.03 kg/L at 15°C (59 °F)
<b>Coefficient of Water/Oil Distribution:</b>	Not available.

### Section 10: STABILITY AND REACTIVITY

<b>Reactivity:</b>	Contact with incompatible materials. Sources of ignition.
<b>Chemical Stability:</b>	Stable under normal storage conditions.
<b>Possibility of Hazardous Reactions:</b>	Contact between heated Asphalt and water can cause a violent eruption.
<b>Conditions to Avoid:</b>	Contact with incompatible materials. Sources of ignition.
<b>Incompatible Materials:</b>	Strong acids. Oxidizers. Alkali metals.
<b>Hazardous Decomposition Products:</b>	Oxides of carbon. Oxides of sulphur. Hydrogen sulphide.

### Section 11: TOXICOLOGICAL INFORMATION

#### EFFECTS OF ACUTE EXPOSURE

##### Product Toxicity

<b>Oral:</b>	Not available.
<b>Dermal:</b>	Not available.
<b>Inhalation:</b>	Not available.



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#### Component Toxicity

Component	CAS No.	LD <sub>50</sub> oral	LD <sub>50</sub> dermal	LC <sub>50</sub>
Bitumen	8052-42-4	Not available.	Not available.	Not available.
Sulphur	7704-34-9	> 8437 mg/kg (rat)	Not available.	Not available.

**Likely Routes of Exposure:** Eye contact. Skin contact. Inhalation. Ingestion.

**Target Organs:** Skin. Eyes. Gastrointestinal tract. Respiratory system.

#### Symptoms (including delayed and immediate effects)

**Inhalation:** May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

**Eye:** May cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Hot liquid product may cause serious thermal burns on direct contact.

**Skin:** May cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching. Hot liquid product may cause serious thermal burns on direct contact. Asphalt fumes can increase susceptibility to sunburn.

**Ingestion:** Hot product may cause thermal burns. Causes burns to nose, mouth, throat, and digestive tract. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea, blood in the feces and/or vomitus may also be seen. If swallowed in large quantities, Asphalt can obstruct the intestine.

**Skin Sensitization:** Not available.

**Respiratory Sensitization:** Not available.

**Medical Conditions Aggravated By Exposure:** Not available.

#### EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)

**Target Organs:** Skin. Eyes. Gastrointestinal tract. Respiratory system. Liver. Kidneys.

**Chronic Effects:** Prolonged or repeated contact may dry skin and cause irritation. Prolonged inhalation can cause irritation of mucous membranes.

**Carcinogenicity:** May cause cancer. Long-term or repeated exposures to Asphalt fumes are possibly carcinogenic to humans.

#### Component Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Bitumen	A4	Group 2B	Not listed.	OSHA Carcinogen.	Listed.

**Mutagenicity:** Not available.

**Reproductive Effects:** Not available.

#### Developmental Effects

**Teratogenicity:** Not available.

**Embryotoxicity:** Not available.

**Toxicologically Synergistic Materials:** Not available.



**Section 12: ECOLOGICAL INFORMATION**

**Ecotoxicity:** Not available.  
**Persistence / Degradability:** Not available.  
**Bioaccumulation / Accumulation:** Not available.  
**Mobility in Environment:** Not available.  
**Other Adverse Effects:** Not available.

**Section 13: DISPOSAL CONSIDERATIONS**

**Disposal Instructions:** Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

**Section 14: TRANSPORT INFORMATION**

**U.S. Department of Transportation (DOT)**

**Proper Shipping Name:** UN3257, ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt), 9, PG III  
**Class:** 9  
**UN Number:** UN3257  
**Packing Group:** III  
**Label Code:**



**Note:** If shipped at temperatures below 100 °C, this product is not considered hazardous goods by DOT criteria and should be shipped as NOT REGULATED.

**Canada Transportation of Dangerous Goods (TDG)**

**Proper Shipping Name:** UN3257, ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt), 9, PG III  
**Class:** 9  
**UN Number:** UN3257  
**Packing Group:** III  
**Label Code:**



**Note:** If shipped at temperatures below 100 °C, this product is not considered hazardous goods by TDG criteria and should be shipped as NOT REGULATED.





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### ICAO/IATA

**Proper Shipping Name:** UN3257, ELEVATED TEMPERATURE LIQUID, N.O.S.  
(Asphalt), 9, PG III

**Class:** 9

**UN Number:** UN3257

**Packing Group:** III

**Label Code:**



**Note:** If shipped at temperatures below 100 °C, this product is not considered hazardous goods by ICAO/IATA criteria and should be shipped as NOT REGULATED.

### Section 15: REGULATORY INFORMATION

#### Chemical Inventories

##### US (TSCA)

The components of this product are in compliance with the chemical notification requirements of TSCA.

##### Canada (DSL)

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

#### Federal Regulations

##### United States

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

##### SARA Title III

No components are listed.

#### State Regulations

##### Massachusetts

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

##### Component

Component	CAS No.	RTK List
Bitumen	8052-42-4	Listed.
Sulphur	7704-34-9	Listed.



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#### New Jersey

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5).

#### Component

Component	CAS No.	RTK List
Bitumen	8052-42-4	Listed.
Sulphur	7704-34-9	Listed.

#### Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

#### Component

Component	CAS No.	RTK List
Bitumen	8052-42-4	Listed.
Sulphur	7704-34-9	Listed.

#### California

#### California Prop 65:



**WARNING** This product can expose you to Bitumen, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### Section 16: OTHER INFORMATION

#### Disclaimer:

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for his own particular use.

**Date of Preparation of SDS:** December 5, 2017

**Version:** 1.3

**GHS SDS Prepared by:** Deerfoot Consulting Inc.

**Phone:** (403) 720-3700