SAFETY DATA SHEET

Section 1: IDENTIFICATION

1.1 PRODUCT IDENTIFIER

Product Name: GemSeal ®GemPatch Cold Patch

1.2 RECOMMENDED USE OF CHEMICAL AND RESTRICTION ON USE

Use: Asphalt pavement repair

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Name/Address: GemSeal Pavement Products
3700 Arco Corporate Drive, Suite 425
Charlotte, NC 28273

Telephone Number: (866) 264-8273 Tech Service 8:00 to 5:00 Eastern, Mon – Fri.

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Telephone Number: CHEMTREC (800) 424-9300
INTERNATIONAL + 01-703-527-3887

Date of Preparation: July 6, 2016 **Version #:** 1.0

Section 2: HAZARD(S) IDENTIFICATION

2.1 CLASSIFICATION OF THE CHEMICAL

NFPA ratings (scale 0 – 4)

Health hazard (blue):	1
Fire hazard (red):	1
Reactivity (yellow):	0

HMIS ratings (scale 0 – 4)

Health hazard:	1
Fire hazard:	1
Reactivity:	0

2.2 LABEL ELEMENTS

Hazard Pictogram

Signal Word: Danger

Hazard statements: Can cause skin, respiratory, and eye irritation. Could potentially be harmful if swallowed or inhaled. Suspected carcinogenic; the International Agency for Research on Cancer (IARC) has determined that there is sufficient evidence for the carcinogenicity of asphalt fumes (refined bitumen) in experimental animals, but no in humans.

Precautionary Statements: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash

hands thoroughly after handling. Do not eat, drink, or smoke when using this product. Wear productive gloves/protective clothing/eye protection/face protection. If exposed or concerned, get medical advice/attention. If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention. Use in well ventilated areas. Store locked up. Dispose of contents and container in accordance with all local, regional, national, and international regulations.

2.3 ADDITIONAL INFORMATION

No additional information available.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS No.	Wt %	GHS-US classification
Limestone	1317-65-3	91 – 98	None known
Asphalt	8052-42-4	2 – 7	Carc. 2
Diesel No.2	68476-34-6	1 – 2	None known
Mixture	Proprietary	<0.2	None known

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

Section 4: FIRST – AID MEASURES

General: In all cases of doubt, or when symptoms persist, seek medical attention.
Eye: Rinse immediately and thoroughly, pulling the eyelids well away from the eye. Do not rub the skin and eyes after direct contact with the product. If symptoms persist, seek medical attention.
Skin: If irritation or redness develops, wash the area with hot soapy water. Use of a waterless hand cleaner will help to remove the asphalt.
Inhalation: If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.
Ingestion: If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Obtain medical attention.

Section 5: FIRE–FIGHTING MEASURES

Unusual Fire & Explosion Hazards: This material may burn, but will not ignite readily. Vapors are heavier than air and can accumulate in low areas. Hot material may ignite flammable mixtures on contact. If water is applied to heated material, it can cause violent foaming and boil over.

Extinguishing Media: Dry chemical, carbon dioxide, foam, or water spray recommended. Water or foam may cause frothing of materials heated above 212°F. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Water fog may be used on flat surfaces such as roads. Do not use water on asphaltic fire in tank or containers since it may cause violent eruption and spreading of burning asphalt.

Products of Combustion: Carbon monoxide, carbon dioxide, and potentially hydrogen sulfide gas.

Fire Fighting Instructions: For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self-contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant.

Isolate immediate hazard area, keep unauthorized personnel out. Stop split/release if can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk.

Water spray may be useful in minimizing dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Water or foam can cause frothing. Avoid spreading burning liquid with water used for cooling purposes.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Wear protective equipment (see section 8). Keep unprotected persons away and remove or secure all ignition sources.

Environmental precautions: Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways.

Small spill: Scoop up material into a suitable container. The material can be re-used.

Large spill: Same as for small spill

Methods for containment and disposal: Cover with earth to reduce adhesiveness and place in appropriate containers for transport. Dispose contaminated material as waste in accordance with local, state, and federal requirements.

Section 7: HANDLING AND STORAGE

Handling: Ensure good ventilation/exhaustion at the workplace. Wear appropriate PPE (see section 8). Avoid contact with skin and eyes. Do not swallow. Avoid breathing vapor or mist. Handle and open container with care. When using do not eat or drink.
General Hygiene Advice: Launder contaminated clothing before re-use. Wash hands before eating, drinking, or smoking.
Storage: Keep out of reach of children. Protect from humidity and water. Keep container tightly closed and in a cool well-ventilated place.
Incompatible Materials: Strong acid, oxidizing agents.

SAFETY DATA SHEET

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

Limestone (1317-65-3)		
USA ACGIH	ACGIH TLA (mg/m3)	10 mg/m3
OSHA PEL	OSHA TWA	5 mg/m3 mist, respiratory fraction; 15 mg/m3 mist, total

Asphalt (8052-42-4)		
USA ACGIH	ACGIH TWA (mg/m3)	0.5 mg/m3

Diesel No. 2		
USA ACGIH	ACGIH TWA (mg/m3)	100 mg/m3

8.2 EXPOSURE CONTROLS

Engineering Controls: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

Personal Protective Equipment (PPE):

Hand Protection: Wear gloves of adequate length to offer appropriate skin protection from incidental contact. General duty work gloves have been found to offer adequate protection for most intended uses.

Eye Protection: Safety glasses with side shields; chemical goggles.

Respiratory: A NIOSH-approved dust mask or filtering face piece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional, following requirements found it OSHA's respiratory standard (29 CFR 1910-134) and ANSI's standard for respiratory protection (288-2).

Skin and Body Protection: Long sleeve protective clothing.

Hygiene Measures: Avoid contact with skin, eyes, and clothing. Wash hands before breaks and after handling.

Other Protective Equipment: A source of clean water should be available in the work area for flushing eyes and skin.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Black in color
Physical form: Solid
Odor: Asphaltic
Odor threshold: No data available
pH: Not applicable
Vapor pressure (mm Hg): No data available
Vapor density (air = 1): No data available
Boiling point: No data available

SAFETY DATA SHEET

Solubility in water: Insoluble
Partition coefficient (n-octanol/water): No data available
Specific gravity: Greater than water
Bulk density: No data available
Evaporation rate (nBuAc = 1): <1
Flash point (TOC): >300°F (149°C)
Auto-ignition temperature: No data available

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal conditions.
Conditions to Avoid: Avoid all possible sources of ignition.
Materials to Avoid: Avoid contact with strong oxidizing agents such as fluorine, nitric acid, chlorine triflouride, manganese trioxide, oxygen difluoride.
Hazardous Decomposition Products: Combustion can yield carbon, nitrogen, and sulfur oxides, hydrogen sulfide.
Hazardous Polymerization: Will not occur.

Section 11: TOXICOLOGY INFORMATION

Limestone – CAS No 1317-65-3

Limestone (calcium carbonate) is not on the NTP, IARC, or ASHA list of known or potential carcinogens. The potential health concern from the use of crushed limestone is from the dust that may be created. Calcium carbonate dust can cause coughing, sneezing, and nasal irritation. Limestone dust may contain respirable silica particles that may cause silicosis if inhaled at high enough concentrations over a prolonged period of time.

Bitumen – CAS No 8052-42-4

Chronic Data:

*Carcinogenicity:*Skin application of asphalt fume condensate fractions caused skin tumors in laboratory mice. Animal studies in which high concentrations of asphaltic fumes were breathed for extended periods of time did not cause carcinogenic effects. Trace amounts of polycyclic aromatic hydrocarbons (PAHs) may be present in asphalts and can be generated upon excessive heating. Some PAHs have been identified as causing carcinogenic and reproductive effects.

The International Agency for Research on Cancer (IARC) has concluded: there is inadequate evidence that bitumen (asphalt) alone are carcinogenic in humans; that there is limited evidence for carcinogenicity of undiluted, steam refined bitumen, and for cracking residue bitumen in laboratory animals; and that there is inadequate evidence for the carcinogenicity of extracts of undiluted air-refined bitumen in laboratory animals.

Acute Data:

Dermal LD50: No information available
LC50: No information available
Oral LD50: No information available

Hydrogen Sulfide – CAS No 7783-06-4

Acute Data:

Dermal LD50: Not applicable
LC50: 600 ppm, 30 min (Human)
Oral LD50: Not applicable

Diesel No. 2 – CAS No 68476-34-6

Acute oral toxicity: LD50 (rat) > 5,000 mg/kg

Section 12: ECOLOGICAL INFORMATION

12.1 ECOTOXICITY Not available

Acute/Chronic Toxicity: No ecological consideration when used according to directions. Normal dilution of this product to drains, sewers, septic systems, and treatment plants is not considered environmentally harmful.

12.2 PERSISTENCE AND DEGRADABILITY Not available

12.3 BIOACCUMULATIVE POTENTIAL Not available

12.4 MOBILITY IN SOIL Not available

12.5 OTHER ADVERSE EFFECTS No additional information available

Section 13: DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Disposal Method: This material must be disposed of in accordance with all local, state, provisional, and federal regulations.

Section 14: TRANSPORT INFORMATION

U.S. Department of Transportation (DOT) Status:

Not regulated by DOT as a hazardous substance

Hazard Class: None
UN Number: Not applicable
UN proper shipping name: Not applicable
Special transport precautions: Do not handle until all safety precautions have been read and understood.
Other Information: No other supplementary information available

SAFETY DATA SHEET

Section 15: REGULATORY INFORMATION

U.S.A. REGULATIONS

OSHA Hazard Communication Standard (29 CFR 1910.1200)

This product is considered to be non-hazardous as defined in OSHA's Hazard Communication Standard.

EPA Toxic Substances Control Act, TSCA (40 CFR part 710)

All components of this product are in compliance with the inventory listing requirements of TSCA.

EPA SARA Title III

Acute Health:	No
Chronic Health:	Yes
Fire Hazard:	No
Pressure Hazard:	No
Reactive Hazard:	No

State Right-to Know Laws:

Connecticut:	No component subject to reporting
Florida:	No component subject to reporting
Illinois:	No component subject to reporting
Louisiana:	No component subject to reporting
Massachusetts:	No component subject to reporting
New Jersey:	No component subject to reporting
Pennsylvania:	No component subject to reporting

Section 16: OTHER INFORMATION

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