

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form :
 Product name : Asphalt Emulsion Hard Pen
 Anionic Asphalt Emulsion
 Synonyms : AE-NT, CHIP LOCK, LTBC-2

1.2. Intended use of the product

Use of the substance/mixture : Tack bond between old and new surface, chip lock on surface of new chip and seal roads

1.3. Details of the supplier of the safety data sheet

UNIQUE Paving Material Corp.
 3993 East 93rd Street
 Cleveland, 44105 - United States of America
 T (216) 441-4880
<http://www.uniquepavingmaterials.com/>

1.4. Emergency telephone number

Emergency number : (800) 424-9300

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Classification (GHS-US)

Acute Toxicity (oral)	Category 5
Skin corrosion/irritation	Category 3
Serious eye damage/eye irritation	Category 2B
Respiratory sensitizer	Category 1B
Skin sensitizer	Category 1B
Carcinogenicity	Category 2
Aspiration hazard	Category 2

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :  
 GHS07 GHS08

Signal word (GHS-US) : Warning
 Hazard statements (GHS-US) : May be harmful if swallowed (oral).
 Causes mild skin irritation.
 Causes eye irritation.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 May cause an allergic skin reaction.
 Suspected of causing cancer.
 May be harmful if swallowed and enters airways.

Precautionary statements (GHS-US) : Prevention
 Wash any exposed skin that may have come in contact with product thoroughly after handling.
 To avoid getting product in eyes, wash any exposed skin that may have come in contact with product thoroughly after handling.
 Avoid breathing dust/fume/gas/mist/spray.
 Obtain special instructions before use.
 Use only in well ventilated space, if ventilation is not available use a self-contained breathing apparatus.

Contaminated work clothes should not be allowed out of workplace.
 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

IF SKIN IRRITATION OCCURS: Wash any exposed skin that may have been in contact with product thoroughly.
 IF IN EYES: Gently flush immediately with cold water for 15 minutes. Do not attempt to remove solidified material from the eye, as this may further injury. Take the victim to obtain medical assistance.
 IF INHALED: Immediately remove victim from source to fresh air, if irritation occurs from over exposure, seek medical attention.
 IF ON SKIN: Wash any exposed skin that may have been in contact with product thoroughly after handling.
 IF EXPOSED OR CONCERNED: Seek medical attention/advice.
 Do NOT induce vomiting.
 IF SKIN IRRITATION OR RASH OCCURS: Get medical advice/attention.
 IF EYE IRRITATION OCCURS: Get medical advice/attention.
 Asphalt Cement at elevated temperatures may produce Hydrogen Sulfide Gas. Inhalation of vapors, mist or fumes containing Hydrogen Sulfide (generated at high temperatures) may cause irritation to nose, throat and respiratory system.
 IF SKIN IRRITATION OR RASH OCCURS: Get medical advice/attention.
 Immediately call a physician if you believe victim has swallowed product and may have breathed it into lungs. Do not induce vomiting.

Storage:

Store locked up.

Disposal:

Dispose of contents/container in accordance with relevant regulations.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Asphalt Cement	(CAS No) 8052-42-4	25 - 60	Carc. 2, H351
Proprietary Emulsifier	(CAS No) Proprietary	1 – 3	Not classified
Other	(CAS No) Proprietary	<1	Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

Eye : Gently flush immediately with cold water for 15 minutes. Do not attempt to remove solidified material from the eye, as this may further injury. Take the victim to obtain medical assistance.

Skin : Hot Emulsified Material - Cool the affected body parts immediately by submerging in cold water until the material has cooled. Do not attempt to remove solidified material from the burn area as this may further tissue damage. Take the victim to obtain medical assistance immediately. Once product has cooled, remove emulsified asphalt by soaking dressing in mineral oil and place over affected area for 2-3 hours. If irritation occurs, call a physician. Never try to remove the material with solvents.

Ingestion	: Ingestion is not likely. If large amounts are swallowed, do not induce vomiting and immediately call the Poison Information Center or a physician and seek medical attention.
Inhalation	: If irritation occurs from inhalation overexposure, immediately remove victim from source to fresh air and seek medical attention.
First-aid Facilities	: Eye wash facilities and safety showers are recommended.

SECTION 5: Firefighting measures

Flash Point	: N.A. °F
Boiling Point	: >200 °F
Lower Explosive Limit	: N.A.
Upper Explosive Limit	: N.A.
Suitable Extinguishing Media	: Foam, Carbon Dioxide, Dry Chemical, and Water Spray may all be suitable in extinguishing fires involving this product. Avoid using water streams to prevent frothing. Use water spray to cool exposed surfaces.

SECTION 6: Accidental release measures

Stop source of leak. Eliminate sources of ignition. Contain by diking or impounding. Absorbents can be used to contain spill. After containment, emulsified asphalt can be collected for disposal. Advise authorities if product has entered a sewer or water source. Assure conformity with local, state, and federal governmental regulations for disposal.

SECTION 7: Handling and storage

Precautions for Safe Handling

When opening covers and outlet cap on storage tanks, use face shield and gloves to avoid possible injury from pressurized asphalt. Hydrogen sulfide can be generated and accumulated in storage tanks and bulk transport compartments. Stay upwind and vent storage hatches before unloading. Keep heating units and flues in storage tanks covered with at least 12 inches of asphalt. Do not overheat.

Conditions for Safe Storage, Including any Incompatibilities

Empty Container Warning: Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Work/Hygienic Practices

Skin contact and the breathing of mists, fumes, or vapors should be reduced to a minimum to avoid any ill effects. Thoroughly wash exposed skin areas after work to avoid dermatitis. Consider the use of lanolin skin treatments before handling or working around asphalt mixtures.

SECTION 8: Exposure controls/personal protection

Occupational Exposure Limits

US OSHA Table Z-2 (29 CFR 1910.1000)

Components	OSHA	ACGIH	NIOSH
Asphalt (CAS 8052-42-4)	PEL-Not established for this material.	TWA-0.5 mg/m3 Inhalable Particulate	CEILING-5.0 mg/m3
EMULSIFIER, Proprietary	PEL-Not established for this material.	-	-
WATER	PEL-Not established for this material.	TWA, STEL – Not established for this material.	Exposure limits not established for this material.

Personal Protective Measures

- Eye/Face Protection : Safety goggles or chemical splash goggles if splashing is anticipated.
- Skin Protection : Oil impervious gloves, such as Neoprene or PVC, if frequent or prolonged contact is expected.
- Respiratory Protection : Respiratory protection is not normally required under normal conditions and adequate ventilation. If high vapors are expected, use respirator approved for organic vapors. Observe respirator protection factor criteria cited in ANSI Z88.2 (1980) and other OSHA requirements found in 29 CFR 1910.134. Use air-supplied respirators or self-contained breathing apparatus for firefighting and in confined spaces when asphalt vapor or Hydrogen Sulfide gas exceeds permissible limits.
- Other/General Protection : Wear body covering to avoid prolonged or repeated exposure. Launder before reuse.
- Engineering Controls : Local or general exhaust required if in an enclosed area to remain below the TLV. If work place exposure limits are exceeded, a NIOSH/MSHA approved air supplied respirator is advised in the absence of proper environmental engineering controls.

SECTION 9: Physical and chemical properties

- Physical State : Liquid
- Appearance : Brown
- Odor : Characteristic Asphalt Odor
- Odor Threshold : N/A
- pH : 7 – 11
- Freezing Point : 32 °F (0 °C)
- Boiling Point : 212 °F (100 °C)
- Flash Point : N/A
- Evaporation Rate : N/A
- Flammability (solid, gas) : N/A
- Upper/Lower Flammability/Explosive Limits : N/A
- Vapor Pressure : <1mm – 10mm Hg @ 77 °F
- Vapor Density : > 1.0

Relative Density	: 1 – 1.15
Solubility with Water	: Completely
Partition Coefficient: N-Octane/Water	: N/A
Auto-Ignition Temperature	: N/A
Decomposition Temperature	: N/A
Specific Gravity	: 0.92 – 1.05

SECTION 10: Stability and reactivity

Chemical Stability	: This product is stable at ambient temperatures.
Possibility of Hazardous Reactions	: Low
Conditions to Avoid	: Avoid extreme temperatures.
Incompatible Materials	: Avoid contact with strong bases.
Hazardous Decomposition Products	: Fumes, Smoke, Carbon Monoxide, Hydrogen Sulfide, Sulphur Dioxide, Aldehydes, and Hydrocarbons

SECTION 11: Toxicological information

Information on likely routes of exposure

Ingestion	: May be harmful if swallowed (oral).
Inhalation	: May cause allergy or asthma symptoms of breathing difficulties if inhaled.
Skin Contact	: May cause mild skin irritation.
Eye Contact	: Causes eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects:

Vapor may contain Hydrogen Sulfide (H₂S) Gas. Exposure to lower concentrations of H₂S can result in eye irritation, sore throat and cough, nausea, shortness of breath, and fluid in the lungs. Long term exposure may result in fatigue, loss of appetite, headaches, irritability, poor memory, and dizziness.

Numerical measures of toxicity:

.02 ppm	: Odor threshold.
10 ppm	: 8-hour per day exposure limit to Hydrogen Sulfide.
10-20 ppm	: Borderline concentration for eye irritation.
10-100 ppm	: Leads to eye damage.
100-150 ppm	: Olfactory nerve paralyzed after a few minutes, sense of smell disappears, and often unawareness of danger.
320-350 ppm	: Leads to pulmonary edema with possibility of death.

- 530-1,000 ppm : Causes strong stimulation of the central nervous system and rapid breathing.
- 800 ppm : Lethal concentration of 50% of humans for 5-minute exposure (LC50).
- >1,000 ppm : Immediate collapse with loss of breathing, even after inhalation of a single breath.

SECTION 12: Ecological information

- Eco-toxicity - Aquatic and Terrestrial : Not listed as a marine pollutant on HMT 172.101
- Persistence and Degradability : No testing has been performed by the manufacturer.
- Bio-accumulative potential : No testing has been performed by the manufacturer.
- Mobility in soil : No testing has been performed by the manufacturer.
- Other adverse effects : N/A

SECTION 13: Disposal considerations

Waste or contaminated asphalt is normally disposed in a special waste or industrial landfill. Consider recycling into pavement mixtures whenever possible.

RCRA Information

This material, if discarded as produced, is not a RCRA "listed" hazardous waste. Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. It is the responsibility of the generator to fully characterize for toxicity and other RCRA parameters prior to disposal (40 CFR 261). Along with properly characterizing all waste materials, consult state and local regulations regarding proper disposal of this material.

SECTION 14: Transport information

- UN Number : NON-HAZARDOUS
- Proper Shipping Name : NON-REGULATED
- Hazardous Classification : NON-REGULATED
- Packing Group : NON-REGULATED
- Environmental Hazards : N/A
- Transport in Bulk : N/A
- Special Provisions : N/A
- Special Precautions : N/A
- Packaging Exceptions : N/A
- Packaging Non-Bulk : N/A

SECTION 15: Regulatory information

U.S Regulatory Information

- Toxic Substances Control Act : This product is listed on the US TSCA Chemical Inventory Section 8(b).
- Clean Water Act : Petroleum hydrocarbons are considered hazardous if released into navigable waters.
- OSHA Hazard Communication : See individual state requirements for Right-To-Know lists.

SARA Hazard Classes

Acute health hazard.

NFPA Rating

Health: 1
Flamability: 0
Reactivity: 0

SECTION 16: Other information

When in storage, avoid freezing temperatures or heating in excess of 212 °F. Both extremes will cause separation of the water from the asphalt, and will render the product unusable and result in a disposal situation. Do not contaminate with cationic emulsions or other asphalt materials such as asphalt cement or cutback asphalts. All of these materials are incompatible and will result in an unusable material that will require waste disposal processing.

This safety data sheet and the information herein is offered in good faith as accurate. The information has been compiled from sources considered to be reliable and accurate to the best of our knowledge, but is not guaranteed to be so. Health and safety precautions in this data sheet may not be adequate for all individuals under all circumstances. It is the users' obligation to evaluate and use this product safely and to comply with all applicable laws and regulations whether they be federal, state, or local. No warranty is made, either expressed or implied through the issuance of this SDS.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

GHS US (GHS HazCom)

“Providing valuable products from valuable people to valuable customers.”

This document contains confidential proprietary and trade secret information of UNIQUE Paving Materials Corp., and copying, dissemination, or use by anyone other than UNIQUE'S intended recipient is strictly prohibited by law.