

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

1.1. Product identifier

Product form : Mixture
Product name : AE - Asphalt Emulsion
Product code : AE - Asphalt Emulsion

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

Use of the substance/mixture : Liquid Roof Membrane

1.3. Details of the supplier of the safety data sheet

Ghemco
PO Box 3977
Santa Fe Springs, CA 90670 - UNITED STATES
T (562) 250-4745
www.ghemco.com

1.4. Emergency telephone number

Emergency number : Chemtrec (800) 424-9300 or International (703) 527-3887
Account CCN837338

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. Label elements

GHS-US labelling

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Hazard pictograms (GHS-US) :



GHS08

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H302 - Harmful if swallowed
H317 - May cause an allergic skin reaction
Precautionary statements (GHS-US) : P102 - Keep out of reach of children
P103 - Read label before use
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P273 - Avoid release to the environment
P391 - Collect spillage

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%	GHS-US classification
Water	(CAS No) 7732-18-5	50 - 60	Not classified
asphaltic bitumen, not cut back	(CAS No) 8052-42-4	34 - 39	Not classified
bentonite, conc quartz (respirabel dust) >=0,1%	(CAS No) 1302-78-9	2 - 6	Not classified
manganese(II)sulfate	(CAS No) 7785-87-7	0.14 - 0.35	Not classified
hydrochloric acid, 10%<=conc<25%, aqueous solutions	(CAS No) 7647-01-0	0.1 - 0.3	Not classified
hydrogen peroxide solution ... %	(CAS No) 7722-84-1	0.05 - 0.2	Not classified

Full text of H-phrases: see section 16 *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

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Wash with water and soap. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.
- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : May cause moderate irritation.
- Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.
- Symptoms/injuries after ingestion : Irritation of the gastric/intestinal mucosa. Swallowing a small quantity of this material will result in serious health hazard.
- Chronic symptoms : No effects known.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Non combustible. Not flammable.
- Explosion hazard : Not applicable.
- Reactivity : No data available.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel

- Protective equipment : Safety glasses. Gloves. Protective clothing.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Stop release. Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
Handling temperature : > 40 (≤ 100) °F
Hygiene measures : Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Tropical #363 Fibered Asphalt Emulsion	
ACGIH	Not applicable
OSHA	Not applicable
Water (7732-18-5)	
ACGIH	Not applicable
OSHA	Not applicable
hydrochloric acid, 10%≤conc<25%, aqueous solutions (7647-01-0)	
OSHA	Not applicable
hydrogen peroxide solution, % (7722-84-1)	
OSHA	Not applicable
maganese sulfate (7785-87-7)	
OSHA	Not applicable
bentonite, conc quartz (respirabel dust) ≥=0,1% (1302-78-9)	
ACGIH	Not applicable
OSHA	Not applicable
asphaltic bitumen, not cut back (8052-42-4)	
OSHA	Not applicable
polyethylenes (9002-88-4)	
OSHA	Not applicable

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.
Materials for protective clothing : No data available.
Hand protection : Wear protective gloves.
Eye protection : Safety glasses. Chemical goggles or safety glasses.

Respiratory protection : Wear appropriate mask.
Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Brownish/Black Liquid.
Colour : Black
Odour : No data available
Odour threshold : No data available
pH : > 6
Relative evaporation rate (butylacetate=1) : No data available
Relative evaporation rate (ether=1) : < 1
Melting point : No data available
Freezing point : < 0 °C
Boiling point : ≈ 100 °C
Flash point : NA
Critical temperature : NA
Auto-ignition temperature : > 400 °F
Decomposition temperature : No data available
Flammability (solid, gas) : NA
Vapour pressure : NA
Vapour pressure at 50 °C : NA
Critical pressure : NA
Relative vapour density at 20 °C : Heavier than Air
Relative density : No data available
Density : 8.8 - 9.5
Solubility : Water: ≈ 100 %
Ethanol: ≈ 100 %
Ether: NA
Acetone: NA
Organic solvent: NA
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : > 10000 cSt
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : NA
NA

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Acute toxicity : Not classified

Tropical - #363 Fibered Asphalt Emulsion	
LD50 oral rat	NA
LD50 dermal rat	NA
LD50 dermal rabbit	NA
LC50 inhalation rat (mg/l)	NA
LC50 inhalation rat (ppm)	NA

hydrogen peroxide solution ... % (7722-84-1)	
LD50 oral rat	1193 mg/kg bodyweight (Rat; OECD 401: Acute Oral Toxicity; Experimental value; 1270 mg/kg bodyweight; Rat; OECD 401: Acute Oral Toxicity; Experimental value; 1026 mg/kg bodyweight; Aqueous solution; Rat; Experimental value; 694 mg/kg bodyweight; Aqueous solution; Rat; Experimental value)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (Rabbit; Experimental value; Other)

manganese(II)sulfate (7785-87-7)	
LD50 oral rat	2150 mg/kg (Rat; Experimental value)

asphaltic bitumen, not cut back (8052-42-4)	
LD50 oral rat	> 2000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)

polyethylenes (9002-88-4)	
LD50 oral rat	> 2000 mg/kg (Rat)

Skin corrosion/irritation : Not classified
(Lack of data)
pH: > 6

Serious eye damage/irritation : Not classified
(Lack of data)
pH: > 6

Respiratory or skin sensitisation : Not classified
(Lack of data)

Germ cell mutagenicity : Not classified
(Lack of data)

Carcinogenicity : Not classified
(Based on available data, the classification criteria are not met)

Tropical - #363 Fibered Asphalt Emulsion	
IARC group	4 - Probably not carcinogenic to humans

hydrochloric acid, 10%≤conc<25%, aqueous solutions (7647-01-0)	
IARC group	3 - Not classifiable

hydrogen peroxide solution ... % (7722-84-1)	
IARC group	3 - Not classifiable

asphaltic bitumen, not cut back (8052-42-4)	
IARC group	3 - Not classifiable

polyethylenes (9002-88-4)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified
(Lack of data)

Specific target organ toxicity (single exposure) : Not classified
(Lack of data)

Specific target organ toxicity (repeated exposure)	: Not classified (Lack of data)
Aspiration hazard	: Not classified (Lack of data)
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: May cause moderate irritation.
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely to be irritating.
Symptoms/injuries after ingestion	: Irritation of the gastric/intestinal mucosa. Swallowing a small quantity of this material will result in serious health hazard.
Chronic symptoms	: No effects known.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Classification concerning the environment: not applicable.
Ecology - air	: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).

hydrochloric acid, 10%≤conc<25%, aqueous solutions (7647-01-0)	
LC50 fish 1	282 mg/l (96 h; Gambusia affinis; Pure substance)
LC50 fish 2	862 mg/l (Leuciscus idus; Pure substance)
TLM fish 1	282 ppm (96 h; Gambusia affinis; Pure substance)

hydrogen peroxide solution ... % (7722-84-1)	
LC50 fish 1	164 mg/l (96 h; Pimephales promelas)
Threshold limit algae 1	63 mg/l (72 h; Skeletonema costatum; Growth rate)
Threshold limit algae 2	138 mg/l (72 h; Skeletonema costatum; Growth rate)

manganese(II)sulfate (7785-87-7)	
LC50 fish 1	2850 mg/l (96 h; Colisa fasciatus; Manganese ion)
EC50 Daphnia 1	8.28 mg/l (48 h; Daphnia magna)
LC50 fish 2	33.8 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 2	10 mg/l (24 h; Daphnia magna)
Threshold limit algae 1	25.7 mg/l (Phaeodactylum; Growth)
Threshold limit algae 2	61 mg/l (72 h; Desmodesmus subspicatus; GLP)

asphaltic bitumen, not cut back (8052-42-4)	
LC50 fish 1	> 1000 mg/l (96 h; Pisces)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
Threshold limit other aquatic organisms 1	> 1000 mg/l (96 h)

12.2. Persistence and degradability

Tropical - #363 Fibered Asphalt Emulsion	
Persistence and degradability	Not established.
Biochemical oxygen demand (BOD)	NA
Chemical oxygen demand (COD)	NA
ThOD	N A
BOD (% of ThOD)	NA

hydrochloric acid, 10%≤conc<25%, aqueous solutions (7647-01-0)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

hydrochloric acid, 10%≤conc<25%, aqueous solutions (7647-01-0)	
BOD (% of ThOD)	Not applicable
hydrogen peroxide solution ... % (7722-84-1)	
Persistence and degradability	Readily biodegradable in water. Readily biodegradable in the soil. No (test)data on mobility of the components available.
manganese(II)sulfate (7785-87-7)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
ThOD	Not applicable (inorganic)
bentonite, conc quartz (respirabel dust) ≥0,1% (1302-78-9)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
asphaltic bitumen, not cut back (8052-42-4)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

Tropical - #363 Fibered Asphalt Emulsion	
Bioaccumulative potential	Not established.
hydrochloric acid, 10%≤conc<25%, aqueous solutions (7647-01-0)	
Log Pow	0.25 (QSAR)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
hydrogen peroxide solution ... % (7722-84-1)	
Bioaccumulative potential	Not bioaccumulative.
manganese(II)sulfate (7785-87-7)	
Bioaccumulative potential	No bioaccumulation data available.
bentonite, conc quartz (respirabel dust) ≥0,1% (1302-78-9)	
Bioaccumulative potential	No bioaccumulation data available.
asphaltic bitumen, not cut back (8052-42-4)	
Log Pow	> 6 (Calculated)
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

hydrochloric acid, 10%≤conc<25%, aqueous solutions (7647-01-0)	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.

12.5. Other adverse effects

Effect on ozone layer	:
Effect on the global warming	: No known ecological damage caused by this product.
Other information	: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

Transport document description : Not Regulated (Water Based Material - KEEP FROM FREEZING)

UN-No.(DOT) : Not Regulated (Water Based Material - KEEP FROM FREEZING)

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

asphaltic bitumen, not cut back (8052-42-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

15.3. US State regulations

Tropical - #363 Fibered Asphalt Emulsion()

U.S. - California - Proposition 65 - Carcinogens List	Yes
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U.S. - California - Proposition 65 - Developmental Toxicity	No
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U.S. - California - Proposition 65 - Reproductive Toxicity - Female	Yes
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U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
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asphaltic bitumen, not cut back (8052-42-4)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Other information : None.

ZLF-PMS 364 CUSTOM TEMPLATE

All information contained in this MSDS is based on current technical data believed to be accurate and reliable. Additions of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since these conditions are outside our control, we furnish this MSDS without any express or implied warranties.