

SECTION 1: Identification

1.1. Product identifier

Product name : Penetron® Injection Foam - Part B
Product code : Not available.

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

Use of the substance/mixture : Concrete protection and permeability reduction

1.3. Details of the supplier of the safety data sheet

Penetron International, Ltd.
45 Research Way, Suite 203
East Setauket, New York 11733 – USA
T +1 (631) 941-9700
info@penetron.com - penetron.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: US and Canada: 1-800-424-9300; International +1 703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

GHS-US classification

Acute toxicity – Oral 4

Skin corrosion/irritation 1 / Sub-category B

Serious eye damage/eye irritation 1

2.2. Label elements (GHS-US)

Hazard pictograms (GHS-US) :



GHS07

GHS05

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

Harmful if swallowed. Causes severe skin burns and eye damage.

2.3. Precautionary statements (GHS-US)

Prevention

: Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dusts or mists. Wear protective gloves/protective clothing/eye protection/face protection.

Response

: Immediately call a POISON CENTER or doctor.

Eyes

: 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.

Skin

: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Inhalation

: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.

Ingestion

: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.

Storage

: Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Disposal

: Dispose of contents/container to an approved waste disposal plant.

2.4. Unknown acute toxicity (GHS-US)

100% of the mixture consists of ingredient(s) of unknown toxicity.

16% of the mixture consists of ingredient(s) of unknown acute oral toxicity.

2.5. Other information

Very toxic to aquatic life with long lasting effects.

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according to the Hazard Communication Standard (CFR 29 1910.1200) HazCom 2012.

SECTION 3: Composition/information on ingredients

3.1. Mixture

| Chemical name | Product identifier | % |
|--------------------|--------------------|---------|
| Dimethyl glutarate | (CAS No) 1119-40-0 | 40 - 45 |
| CTS-17-08 | Trade Secret | 30 - 40 |
| Dimethyl succinate | (CAS No) 106-65-0 | 10 - 20 |

* 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

- General advice : Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
- First-aid measures after inhalation : Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical advice/attention.
- First-aid measures after skin contact : Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention.
- First-aid measures after eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
- First-aid measures after ingestion : Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.
- Self-protection of the first aider : Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Wear personal protective clothing (see section 8).

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

Burning sensation.

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

- Notes to physician : Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : CAUTION: Use of water spray when fighting fire may be inefficient.

5.2. Special hazards arising from the substance or mixture

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.

5.3. Hazardous combustion products

Products of combustion includes but not limited to oxides of carbon.

5.4. Advice for firefighters

- Protection during firefighting : Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- Personal precautions : Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
- Other information : Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

See Section 12 for Ecological Information.

6.3. Methods and material for containment and cleaning up

- Methods for containment : Prevent further leakage or spillage if safe to do so.

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Methods for cleaning up : Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling : Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Protect from moisture. Store locked up. Store away from other materials.

Incompatible products : None known based on information supplied.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure guidelines : This product, as supplied does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

8.2. Appropriate engineering controls

Engineering measures : Showers, eyewash stations, ventilation systems.

8.3. Individual protection measures, such as personal protective equipment

Eye/face protection : Face protection shield.

Hand protection : Wear suitable gloves. Impervious gloves.

Skin and body protection : Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Respiratory protection : No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations : Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Clear to light yellow

Color : No data available

Odor : Characteristic

Odor threshold : No data available

pH : 8

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Flammability (solid, gas) : No data available

Explosion limits : No data available

Explosive properties : No data available

Oxidizing properties : No data available

Vapor pressure : No data available

Vapor density : No data available

Relative density : 0.99

Relative vapor density at 20°C : No data available

Solubility : No data available

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

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| | |
|---------------------------|---------------------|
| Decomposition temperature | : No data available |
| Viscosity | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Exposure to air or moisture over prolonged periods.

10.5. Incompatible materials

Acids. Bases. Oxidizing agent.

10.6. Hazardous decomposition product

Oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on likely routes of exposure

Specific test data for the substance or mixture is not available.

| | |
|--------------|---|
| Inhalation | : Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. |
| Eye contact | : Specific test data for the substance or mixture is not available. Causes burns. (based on components). Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. May cause irreversible damage to eyes. |
| Skin contact | : Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns. |
| Ingestion | : Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. |

11.2. Information on components

| Chemical name | Oral LD50 (Rat) | Dermal LD50 (Rabbit) | Inhalation LC50 (Rat) |
|--------------------------------|-----------------|----------------------|-----------------------|
| Dimethyl glutarate (1119-40-0) | = 8191 mg/kg | - | > 5.6 mg/L 4 h |
| CTS-15-072 (Trade Secret) | = 200 mg/kg | = 3200 mg/kg | - |
| Dimethyl succinate (106-65-0) | > 5 g/kg | > 5 g/kg | - |

11.3. Information on toxicological effects

Symptoms : Redness. Burning. May cause blindness. Coughing and/ or wheezing.

11.4. Delayed and immediate effects as well as chronic effects from short- and long-term exposure

| | |
|--|---|
| Skin corrosion/irritation | : Classification based on data available for ingredients. Causes burns. |
| Serious eye damage/eye irritation | : Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns. |
| Respiratory or skin sensitization | : No information available. |
| Germ cell mutagenicity | : No information available. |
| Carcinogenicity | : No information available. |
| Reproductive toxicity | : No information available. |
| Specific target organ toxicity (single exposure) | : No information available. |
| Specific target organ toxicity (repeated exposure) | : No information available. |
| Aspiration hazard | : No information available. |

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| ATEmix | Oral | Dermal |
|---|----------------|-----------------------|
| Numerical measures of toxicity (based on section 3.1) | 1,008.00 mg/kg | 15,238.00 mg/kg (ATE) |

SECTION 12: Ecological information

12.1. Ecotoxicity

Very toxic to aquatic life with long lasting effects.

| Chemical Name | Toxicity to Fish | Daphnia Magna (Water Flea) |
|--------------------------------|--|------------------------------|
| Dimethyl glutarate (1119-40-0) | 96h LC50: 19.6 - 26.2 mg/L (Pimephales promelas) | 48h EC50: 122.1 - 163.5 mg/L |
| CTS-15-072 (Trade Secret) | 96h LC50: 0.1 - 1 mg/L (Brachydanio rerio) | - |
| Dimethyl succinate (106-65-0) | 96h LC50: 50 - 100 mg/L (Brachydanio rerio) | - |

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

| Chemical Name | Log Pow |
|-------------------------------|---------|
| Dimethyl succinate (106-65-0) | 0.19 |

12.4. Mobility

No information available.

12.4. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Disposal Methods : This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.
- Contaminated packaging : Dispose of contents/containers in accordance with local regulations. Do not reuse empty containers.

SECTION 14: Transport information

14.1 DOT

- UN Number : UN2735
- Proper shipping name : POLYAMINES, LIQUID, CORROSIVE, N.O.S.
- Transport hazard class(es) : 8



- Packing group : II
- Description : UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S. (DIMETHYL GLUTARATE, COCO ALKYL DIMETHYLAMINES), 8, II
- ERG Number : 153
- Marine pollutant : No

14.2 ADR

- UN Number : UN2735
- Proper shipping name : POLYAMINES, LIQUID, CORROSIVE, N.O.S.
- Transport hazard class(es) : 8



- Packing group : II

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Classification code : C7
Tunnel restriction code : (E)
Description : UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S. (DIMETHYL GLUTARATE, COCO ALKYLDIMETHYLAMINES), 8, II, (E)
Marine pollutant : No
14.3 IMDG/IMO
UN Number : UN2735
Proper shipping name : POLYAMINES, LIQUID, CORROSIVE, N.O.S.
Transport hazard class(es) : 8



Packing group : II
EMS-Number : F-A, S-B
Description : UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S. (DIMETHYL GLUTARATE, COCO ALKYLDIMETHYLAMINES), 8, II
Marine pollutant : No
14.4 IATA
UN Number : UN2735
Proper shipping name : AMINES, LIQUID, CORROSIVE, N.O.S.
8



Transport hazard class(es) :
Packing group : II
ERG Code : 8L
Description : UN2735, AMINES, LIQUID, CORROSIVE, N.O.S. (DIMETHYL GLUTARATE, COCO ALKYLDIMETHYLAMINES), 8, II
Marine pollutant : No

14.5. Other information

Special transport precautions : Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations

SARA 313 : Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard categories

| Acute Health Hazard | Chronic Health Hazard | Fire Hazard | Sudden Release of Pressure Hazard | Reactive Hazard |
|---------------------|-----------------------|-------------|-----------------------------------|-----------------|
| Yes | No | No | No | No |

CWA : This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (CWA) (40 CFR 122.21 and 40 CFR 122.42)
CERCLA : This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

15.2. US State regulations

California Proposition 65 : This product does not contain any Proposition 65 chemicals.
US State Right-to-Know : This product does not contain any substances regulated by the right-to-know regulations.

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SECTION 16: Other information

Date of issue : 10/23/2015

Revision date : 07/26/2018

Other information : None.

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