



Material Safety Data Sheet
Product: Veil Safe – Part B
Mfg: Underground Technologies LLC

Section 1. Substance/preparation and company Identification

| <u>Company</u> | <u>24 Hour Emergency Response Information</u> |
|--|---|
| Underground Technologies LLC 2546 Elliott Troy, MI 48083 | CHEMTREC: (800) 424-9300 UGT Phone: (248) 765-8966 UGTContact: David Wahl |

Section 2. Composition/Information on ingredients

| | <u>CAS #</u> | <u>% Wt</u> |
|--------------------------|--------------|-------------|
| Hazardous Ingredients: | | |
| Polyoxypropylenediamine | 9046-10-0 | 10-40 |
| Polyoxypropylenetriamine | 64852-22-8 | 10-20 |
| Diethyltoluenediarnine | 68479-98-1 | 10-40 |
| Carbon Black | | 2- 5 |

Section 3. Hazard identification

Emergency Overview

**WARNING: CAUSES SKIN IRRITATION
RISK OF SERIOUS DAMAGE TO EYES**

Ensure adequate ventilation.
Wear a NIOSH-certified (or equivalent) organic vapor respirator.
Wear NIOSH-certified chemical goggles.
Avoid contact with the skin, eyes and clothing.
Wear protective clothing.

Potential health effects

Eyes: Irritating to eyes.
Skin: Irritating to skin.
Ingestion: Harmful if swallowed'
Inhalation: Irritating to respiratory system.

Acute Effects

Eyes: Causes irritation, experienced as pain, with excess blinking and tear production, and seen as extreme redness and swelling of the eye and chemical burns of the eye. Severe eye damage may cause blindness.

Skin: Causes severe irritation with pain, severe excess redness and swelling with chemical burns, blister formation, and possible tissue destruction. Other than the potential skin irritation effects noted above, acute (short term) adverse effects are not expected from brief skin contact. See: "Other effects", below, and Section 11 for information regarding potential long term effects.

Ingestion: Causes burning the mouth, throat, and stomach with abdominal and chest pain, nausea, vomiting, diarrhea, thirst, weakness and collapse. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

Inhalation: Vapors or mist, especially as generated from heating the material or as from exposure in poorly ventilated areas or confined spaces, are irritating and cause nasal discharge, coughing, and discomfort in nose and throat. Prolonged or repeated overexposure may result in lung damage.

Sensitization Properties: Unknown.

Sub-Chronic/Chronic Toxicity

Chronic: Repeated skin contact may cause a persistent irritation or dermatitis. Repeated inhalation may cause lung damage. Skin contact may aggravate an existing dermatitis. Overexposure to vapor, dust or mist may aggravate existing respiratory conditions, such as asthma, bronchitis, and inflammatory or fibrotic respiratory disease.

Other Remarks: This product contains one or more amines which may produce temporary and reversible hazy or blurred vision. Symptoms disappear when exposure is terminated. Carcinogenicity: Not known as a cancer causing material.



Material Safety Data Sheet
Product: Veil Safe – Part B
Mfg: Underground Technologies LLC

Section 4. First-aid measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

Skin: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

Ingestion: If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Notes to Physician: *Eyes.* Stain for evidence of corneal injury. If cornea is burned, instill antibiotic steroid preparation frequently. Workplace vapors have produced reversible corneal epithelial edema impairing vision. *Skin.* This compound is known as a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burns. If burned, treat as thermal burn. *Ingestion.* Swallowing of this corrosive material may result in severe ulceration, inflammation and possible perforation of the upper alimentary tract, with hemorrhage and fluid loss. Aspiration of this product during induced emesis can result in severe lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a Poison Control Center for additional treatment information. *Respiratory.* This compound is a known pulmonary sensitizer. Treatment is essentially symptomatic. An individual having a skin or pulmonary sensitization reaction to this material should be removed from exposure to any amine.

Section 5. Fire-fighting measures

Flash point, >300 °F (185 °C) CCC
Flammable Limits: Not determined
Autoignition Temperature: Not determined.

Suitable extinguishing media: Carbon dioxide, dry chemical or foam, water.

Protective equipment for fire-fighting: Wear self-contained breathing apparatus and chemical-protective clothing.

Further information: Collect contaminated extinguishing water separately; do not allow reaching sewage or effluent systems.

Explosion Hazards: None

Section 6. Accidental release measures

Personal precautions: Avoid inhalation. Avoid contact with the skin, eyes and clothing.

Environmental precautions: Do not empty into drains.

Cleanup: Ventilate area. Pick up with suitable absorbent materials (e.g. sand, sawdust, general-purpose binder). Dispose of absorbed material in accordance with regulations.



Material Safety Data Sheet
Product: Veil Safe – Part B
Mfg: Underground Technologies LLC

Section 7. Handling and storage

General advice: Ensure thorough ventilation of stores and work areas.

Protection against fire and explosion: Take precautionary measures against static discharges. Avoid all sources of ignition: Heat sparks, open flame. Provide exhaust ventilation,

General advice: Containers should be stored tightly sealed in dry place. Store between 60-100°F (15.535°C). Keep put of direct sunlight. Avoid contact with eyes and skin. Do not breathe aerosols or vapors. Warning properties (irritation of the eyes, nose and throat or odor) are not adequate to prevent chronic overexposure from inhalation. This material can produce asthmatic sensitization upon either single inhalation exposure to a relatively high concentration or upon repeated inhalation exposures to lower concentrations. Exposure to vapors of heated amines can be extremely dangerous. Employee education and training in the safe use and handling of this compound are required under the OSHA Hazard Communication Standard.

Shelf life: 6 months.

Storage incompatibility: Segregate from acids and acid forming substances.

Section 8. Exposure controls and personal protection

Personal protective equipment

Respiratory protection: Wear respiratory protection if ventilation is inadequate.

Hand protection: Chemical resistant protective gloves. Consult with glove manufacturer.

Eye protection: Chemical goggles or safety glasses with side-shields and face shield.

General safety and hygiene measures: Avoid contact with the skin, eyes and clothing. Do not breathe vapors / spray. Wearing of closed work clothing is required additionally to the stated personal protection equipment.

General

Engineering Controls: Local exhaust should be used to maintain levels below TLV whenever amines are processed, heated or spray applied.

Section 9. Physical and chemical properties

| | |
|-------------------|----------------------|
| Form: | liquid |
| Odor: | amine-like |
| Color: | various-as pigmented |
| Appearance: | viscous liquid |
| pH value: | approx. 10.5 |
| Boiling point: | not established |
| Freezing point: | <-40°F |
| Evaporation rate: | not established |
| Density: | — 8 . 4 @ 77 ° F |
| Specific gravity: | 1.0 (water=1) @ 77°F |
| Viscosity, | 300-600 CST @ 77°F |
| Molecular wt. | not established |

Comments

| | |
|-------------------|-------------------------------|
| Percent volatile: | Negligible |
| Vapor pressure: | < 1 mm Hg @ 454 °F (234.4 °C) |
| Vapor Density: | 8.5 (air=1) |
| Water solubility: | < 10 mg/1 |

Solubility (qualitative): soluble: Organic solvents, Methanol, Acetone



Section 10. Stability and reactivity

Stable: Yes

Hazardous polymerization: No

Hazard Decomposition: Toxic levels of ammonia, combustion products of nitrogen, carbon monoxide, and carbon dioxide. Irritating aldehydes and ketones may be formed on burning in a limited air supply.

Section 11. Toxicological information

Acute Toxicity

Dermal: LD50/rat: The product has not been tested. The statement has been derived from products of a similar structure and composition.

Skin irritation: Non-corrosive. (Epidermal Corrosivity Test). The product has not been tested. The statement has been derived from products of a similar structure and composition.

Eye irritation: Risk of serious damage to eyes. (HET-CAM test in vitro)

Inhalation: This product is a respiratory irritant and potential respiratory sensitizer.

Ingestion Ingestion may cause irritation of the gastrointestinal tract. Based on the acute oral LD50 this product is considered practically non-toxic by ingestion.

Section 12. Ecological information

Environmental fate and distribution:

Biodegradation evaluation: No data available concerning biodegradation.

Environmental toxicity:

Acute and prolonged toxicity to fish: No data available concerning fish toxicity.

Acute toxicity to aquatic invertebrates: No data available concerning toxicity for daphnia.

Toxicity to aquatic plants: No data available concerning toxicity for algae.

Other ecotoxicological advice: Due to the pH-value of the product, neutralization is generally required before discharging sewage into treatment plants. Do not discharge product into the environment without control.

Section 13. Disposal considerations

Waste disposal of substance: Waste must be disposed of in accordance with federal, state and local environmental control regulations. Incineration is the preferred method.

Empty containers: "Empty" containers retain product 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, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner, or properly disposed of.

RCRA/USPA WASTE INFORMATION: If discarded in its purchased form, this product would not be considered a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing this product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)



Material Safety Data Sheet
Product: Veil Safe – Part B
Mfg: Underground Technologies LLC

Section 14. Transport information

For major spills call Chemtrec (800-424-9300)

DOT: Proper Shipping Name: Amines, Liquids, Toxic, Corrosive, NOS (Polyoxypropylenediamine)
Hazard Class: 8 (6.1)
NA / UN Number: UN 2922
Packing Group: III
Label Required: CORROSIVE (toxic)

IMDG Proper Shipping Name: Same as DOT

ICAO Proper Shipping Name: Same as DOT

Section 15. Regulatory information

U. S. Federal Regulations:

SARA Title III:
Section 302/304 Extremely Hazardous Substances

SARA Title III

Section 302/304 Extremely Hazardous Substances

| Chemical Name | CAS No. | Range in % | TPQ | RQ |
|---------------|---------|------------|-----|----|
| None | | | | |

Section 311 Hazardous Categorization: Acute X Chronic Fire Pressure Reactive N/A

Section 311 Toxic Chemical:

| Chemical Name | CAS NO. | Concentration |
|---------------|---------|---------------|
| None | | |

CERCLA 102 (a)/DOT Hazardous Substances:

| Chemical Name | CAS NO. | Range % |
|---------------|---------|---------|
| None | | |

States Right-to-Know Regulations:

| Chemical Name | State Right-to-know |
|---------------|---------------------|
| None | |

State list: CT, FL,IL, MI,LA,MA,NJ,PA, RI

California Prop. 65: The following detectable components of this product are substances or belong to classes of substances, known to the State of California to cause cancer and/or reproductive toxicity.

| Chemical Name | CAS NO. |
|---------------|---------|
| None | |

INTERNATIONAL REGULATIONS:

TSCA Inventory Status: This product, or its components, are listed on or are exempt from the Toxic Substance Control Act Chemical Substance Inventory.

WHMIS Classification: Class D, Div 2, Subdiv B: Irritant

Canadian Inventory Status: This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL). This product is considered an exempt polymer under Canadian (CEPA) regulations (2% Polymer Rule).

EINECS Inventory Status, Australian Inventory Status, Japan Inventory Status: Not determined.



Material Safety Data Sheet
Product: Veil Safe – Part B
Mfg: Underground Technologies LLC

Section 16. Other information

HMIS 111 rating: Health: 2 Flammability: 1 Physical hazard: 1
(HMIS uses a numbering scale ranging from 0-4 to indicate the degree of hazard. Zero means essentially no hazard; four rating indicates high hazard)

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITH INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY UNDERGROUND TECHNOLOGIES HEREUNDER ARE GIVEN GRATIS AND VISURON TECHNOLOGIES ASSUMES NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED. ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

END OF MSDS