

**1. Identification**

<b>Product identifier</b>	<b>Vault Liner Primer</b>
<b>Other means of identification</b>	None.
<b>Recommended use</b>	Industrial applications
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Company Name</b>	ErgonArmor, a division of Ergon Asphalt & Emulsions, Inc.
<b>Address</b>	2829 Lakeland Drive Jackson, MS 39232 USA
<b>After hours telephone number</b>	1-800-222-7122
<b>Normal work hours telephone number</b>	1-877-982-7667
<b>Website</b>	www.ergonarmor.com
<b>E-mail</b>	sds@ergon.com
<b>Emergency 24-hour telephone number</b>	CHEMTREC: North America 1-800-424-9300 International 1-800-527-3887
<b>Information on operation hours</b>	8:00 a.m. to 5:00 p.m.

**2. Hazard(s) identification**

<b>Physical hazards</b>	Flammable liquids	Category 2
<b>Health hazards</b>	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Reproductive toxicity (the unborn child)	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2
	Aspiration hazard	Category 1
<b>Environmental hazards</b>	Not classified.	
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Danger
<b>Hazard statement</b>	Highly flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of damaging the unborn child. May cause damage to organs ( ) through prolonged or repeated exposure.

## Precautionary statement

### Prevention

Use personal protective equipment as required. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Avoid release to the environment. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Use only non-sparking tools.

### Response

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor// if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Collect spillage. In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction.

### Storage

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

### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

### Hazard(s) not otherwise classified (HNOC)

May form explosible dust-air mixture if dispersed. Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Dust clouds can be ignited by an electrostatic discharge.

### Supplemental information

None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
TOLUENE		108-88-3	50-60
2-BUTANONE		78-93-3	10-20
PROPRIETARY INGREDIENTS		N/A	10-20

## 4. First-aid measures

### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control center immediately. Get medical attention. Rescuers should put on appropriate protective gear. Do not use mouth-to-mouth method if victim inhaled the substance. If not breathing, give artificial respiration or give oxygen by trained personnel.

### Skin contact

Remove contaminated clothing immediately and wash skin with soap and water.

### Eye contact

Flush thoroughly with water. If irritation occurs, get medical assistance.

### Ingestion

Get medical attention. Call a POISON CENTER or doctor/physician. Rinse mouth thoroughly. Provide fresh air, warmth and rest, preferably in comfortable upright sitting position. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. When risk of unconsciousness, place and transport the victim in secured side position. Do not induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions.

### Most important symptoms/effects, acute and delayed

May cause respiratory irritation. Coughing. Defatting of the skin. Auditory system effects may include temporary hearing loss and/or ringing in the ears. Irritation of nose and throat. Shortness of breath. Fever. Discomfort in the chest. Mild skin irritation. May cause redness and pain. Dermatitis. Choking.

### Indication of immediate medical attention and special treatment needed

If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately. If the product is ingested, probable mucosal damage may contraindicate the use of gastric lavage. Treat the affected person appropriately.

### General information

Call a physician if symptoms develop or persist. If exposed or concerned: get medical attention/advice.

## 5. Fire-fighting measures

### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### Unsuitable extinguishing media

Do not use water as an extinguisher.

### Specific hazards arising from the chemical

Flammable or explosive mixtures with air may be formed.

**Special protective equipment and precautions for firefighters** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Keep unnecessary personnel away. Do not touch or walk through spilled material. Remove sources of ignition. Avoid breathing mist or vapor. Ensure adequate ventilation. Wear appropriate personal protective equipment. In case of inadequate ventilation, use respiratory protection. See Section 8 of the SDS for Personal Protective Equipment. Wear suitable protective clothing.

**Methods and materials for containment and cleaning up** Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Soak up with inert absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading.

**Environmental precautions** Avoid discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the National Rivers Authority or other appropriate regulatory body. Runoff may pollute waterways.

## 7. Handling and storage

**Precautions for safe handling** Avoid contact with skin, eyes and clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using the product. "Empty" containers retain product residue (liquid or vapor) and can be dangerous.

**Conditions for safe storage, including any incompatibilities** Keep containers tightly closed in a dry, cool and well-ventilated place. Avoid heat, sparks, open flames and other ignition sources. Keep out of the reach of children.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
2-BUTANONE (CAS 78-93-3)	PEL	590 mg/m <sup>3</sup> 200 ppm

#### US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
TOLUENE (CAS 108-88-3)	Ceiling TWA	300 ppm 200 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value
2-BUTANONE (CAS 78-93-3)	STEL TWA	300 ppm 200 ppm
TOLUENE (CAS 108-88-3)	TWA	20 ppm

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
2-BUTANONE (CAS 78-93-3)	STEL TWA	885 mg/m <sup>3</sup> 300 ppm 590 mg/m <sup>3</sup> 200 ppm
TOLUENE (CAS 108-88-3)	STEL TWA	560 mg/m <sup>3</sup> 150 ppm 375 mg/m <sup>3</sup> 100 ppm

### Biological limit values

#### ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
2-BUTANONE (CAS 78-93-3)	2 mg/l	MEK	Urine	*
TOLUENE (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*

**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
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0.02 mg/l

Toluene

Blood

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\* - For sampling details, please see the source document.

**Exposure guidelines****US - California OELs: Skin designation**

TOLUENE (CAS 108-88-3)

Can be absorbed through the skin.

**US - Minnesota Haz Subs: Skin designation applies**

TOLUENE (CAS 108-88-3)

Skin designation applies.

**Appropriate engineering controls**

General ventilation normally adequate. Use explosion-proof equipment. Use process enclosures, local exhaust ventilation, or other engineering controls to control sources of dust, mist or vapor. Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Wear safety glasses with side shields (or goggles) and a face shield.

**Skin protection****Hand protection**

Use protective gloves, goggles and suitable protective clothing. Nitrile or neoprene gloves are recommended. Neoprene, butyl rubber, nitrile or Viton gloves are recommended.

**Other**

Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent). Wear appropriate chemical resistant gloves. Recommended gloves include rubber, neoprene, nitrile or viton. The use of polyvinyl alcohol (PVA) gloves is recommended. Wear appropriate clothing to prevent repeated or prolonged skin contact. Where splashing is possible, full chemically resistant protective clothing (e.g., acid suit) and boots are required.

**Respiratory protection**

Avoid breathing dust/fume/gas/mist/vapors/spray. Use an organic vapor respirator for concentrations exceeding the Occupational Exposure Limit.

**Thermal hazards**

Not available.

**General hygiene considerations**

Use good industrial hygiene practices in handling this material. Wash hands after handling and before eating. Launder contaminated clothing before reuse. Do not get in eyes, on skin, on clothing. Avoid contact with skin. Avoid breathing vapors from heated material.

**9. Physical and chemical properties****Appearance**

Black liquid

**Physical state**

Liquid.

**Form**

Not available.

**Color**

Black.

**Odor**

Solvent.

**Odor threshold**

Not available.

**pH**

Not available.

**Melting point/freezing point**

Not available.

**Initial boiling point and boiling range**

Not available.

**Flash point**

Not available.

**Evaporation rate**

2 - 3 estimated

**Flammability (solid, gas)**

Not available.

**Upper/lower flammability or explosive limits****Explosive limit - lower (%)**

Not available.

**Explosive limit - upper (%)**

Not available.

**Vapor pressure**

Not available.

**Vapor density**

Not available.

**Relative density**

Not available.

**Solubility(ies)****Solubility (water)**

Insoluble.

<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	8.40 lbs/gal estimated
<b>Percent volatile</b>	65 - 75 % by weight
<b>Specific gravity</b>	1 estimated
<b>VOC</b>	< 700 g/l estimated 5.8 lb/gal estimated

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Keep away from heat, sparks and open flame.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Upon decomposition, this product emits oxides of sulfur, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Harmful if inhaled. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Decrease in blood pressure, changes in heart rate, and cyanosis may result from over-exposure to vapor or skin exposure. Prolonged inhalation may be harmful
<b>Skin contact</b>	Causes skin irritation. May cause an allergic skin reaction. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
<b>Eye contact</b>	Causes eye irritation. May cause pain. May cause tearing, burning sensation and redness. May cause swelling.
<b>Ingestion</b>	May be harmful if swallowed. Fatal if swallowed. Irritating to mouth, throat and stomach.

### Symptoms related to the physical, chemical and toxicological characteristics

Irritating to mouth, throat, and stomach.

### Information on toxicological effects

#### Acute toxicity

Components	Species	Test Results
2-BUTANONE (CAS 78-93-3)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 8000 mg/kg
<b>Oral</b>		
LD50	Rat	2300 - 3500 mg/kg
TOLUENE (CAS 108-88-3)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	14.1 ml/kg
<b>Inhalation</b>		
LC50	Rat	8000 ppm, 4 Hours
<b>Oral</b>		
LD50	Rat	2.6 g/kg
<b>Skin corrosion/irritation</b>	Not available.	

**Serious eye damage/eye irritation** Not available.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not available.

**Skin sensitization** Not available.

**Germ cell mutagenicity** Not available.

**Carcinogenicity**

**IARC Monographs. Overall Evaluation of Carcinogenicity**

TOLUENE (CAS 108-88-3) 3 Not classifiable as to carcinogenicity to humans.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not listed.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**Reproductive toxicity** Not available.

**Specific target organ toxicity - single exposure** Not available.

**Specific target organ toxicity - repeated exposure** Liver. Kidneys. Central nervous system.

**Aspiration hazard** Not available.

**12. Ecological information**

**Ecotoxicity**

Product		Species	Test Results
Vault Liner Primer			
<b>Aquatic</b>			
Crustacea	EC50	Daphnia	18.5735 mg/l, 48 hours estimated
Fish	LC50	Fish	159.1934 mg/l, 96 hours estimated
<b>Components</b>		<b>Species</b>	<b>Test Results</b>
2-BUTANONE (CAS 78-93-3)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	4025 - 6440 mg/l, 48 hours
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	> 400 mg/l, 96 hours
TOLUENE (CAS 108-88-3)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon, silver salmon (Oncorhynchus kisutch)	8.11 mg/l, 96 hours

**Persistence and degradability** Not available.

**Bioaccumulative potential** Not available.

**Partition coefficient n-octanol / water (log Kow)**

2-BUTANONE	0.29
TOLUENE	2.73

**Mobility in soil** Not available.

**Other adverse effects** Not available.

**13. Disposal considerations**

**Disposal instructions** All wastes must be handled in accordance with local, state and federal regulations. Material should be recycled if possible. Incinerate or landfill. Do not allow runoff to sewer, waterway or ground. Do not allow this material to drain into sewers/water supplies. Make sure containers are empty before discarding (explosion risk).

**Hazardous waste code** Not regulated.

**US RCRA Hazardous Waste U List: Reference**

2-BUTANONE (CAS 78-93-3) U159  
TOLUENE (CAS 108-88-3) U220

**Waste from residues / unused products** Not available.

**Contaminated packaging** Not available.

**14. Transport information****DOT**

**UN number** UN1263  
**UN proper shipping name** Paint related material including paint thinning, drying, removing, or reducing compound  
**Transport hazard class(es)**  
**Class** 3  
**Subsidiary risk** -  
**Label(s)** 3  
**Packing group** III  
**Special precautions for user** Not available.  
**Special provisions** B1, B52, IB3, T2, TP1, TP29  
**Packaging exceptions** 150  
**Packaging non bulk** 173  
**Packaging bulk** 242

**IATA**

**UN number** UN1263  
**UN proper shipping name** Paint related material (including paint thinning or reducing compounds)  
**Transport hazard class(es)**  
**Class** 3  
**Subsidiary risk** -  
**Packing group** III  
**Environmental hazards** No.  
**ERG Code** 3L  
**Special precautions for user** Not available.  
**Other information**  
**Passenger and cargo aircraft** Allowed with restrictions.  
**Cargo aircraft only** Allowed with restrictions.

**IMDG**

**UN number** UN1263  
**UN proper shipping name** PAINT (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)  
**Transport hazard class(es)**  
**Class** 3  
**Subsidiary risk** -  
**Packing group** III  
**Environmental hazards**  
**Marine pollutant** No.  
**EmS** F-E, S-E  
**Special precautions for user** Not available.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not available.

DOT



IATA; IMDG



## 15. Regulatory information

### US federal regulations

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

2-BUTANONE (CAS 78-93-3)

Listed.

TOLUENE (CAS 108-88-3)

Listed.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Immediate Hazard - Yes

Delayed Hazard - Yes

Fire Hazard - Yes

Pressure Hazard - No

Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

#### SARA 311/312

No

#### Hazardous chemical

#### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
TOLUENE	108-88-3	55

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

TOLUENE (CAS 108-88-3)

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

#### Safe Drinking Water Act (SDWA)

Not regulated.

### US state regulations

#### US - California Proposition 65 - CRT: Listed date/Developmental toxin

TOLUENE (CAS 108-88-3)

Listed: January 1, 1991

#### US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

TOLUENE (CAS 108-88-3)

Listed: August 7, 2009



**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

2-BUTANONE (CAS 78-93-3)

TOLUENE (CAS 108-88-3)

**International Inventories**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 07-11-2017

**Version #** 01

**NFPA ratings** Health: 2  
Flammability: 3  
Instability: 0

**Disclaimer** Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of OSHA.