

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : Encapture  
Product code : 40113

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

#### 1.3. Details of the supplier of the safety data sheet

CaroVail  
4180 State Rte. 29  
Salem, NY 12865  
T 1-518-854-9785

#### 1.4. Emergency telephone number

Emergency number : 1-800-424-9300  
ChemTrec

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flam. Liq. 4 H227  
Skin Irrit. 2 H315

Full text of H-statements: see section 16

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H227 - Combustible liquid  
H315 - Causes skin irritation

Precautionary statements (GHS-US) : P210 - Keep away from sparks, flames, heat or hot surfaces. - No smoking  
P264 - Wash hands, forearms and face thoroughly after handling  
P280 - Wear Eye protection, Face protection, Skin protection. Clothing protection  
P302+P352 - If on skin: Wash with plenty of water  
P321 - Specific treatment (see additional precautions on this label)  
P332+P313 - If skin irritation occurs: Get medical advice/attention  
P362 - Take off contaminated clothing and wash before reuse  
P370+P378 - In case of fire: Use CO2, Dry powder, Sand, Foam to extinguish  
P403+P235 - Store in a well-ventilated place. Keep cool  
P501 - Dispose of contents/container to a licensed hazardous waste facility in accordance with state and local agencies

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

Not applicable

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

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Name	Product identifier	%	GHS-US classification
dimethyl sulfoxide	(CAS No) 67-68-5	30 - 80	Flam. Liq. 4, H227
2(2-aminoethoxy)ethanol	(CAS No) 929-06-6	0.1 - 5	Acute Tox. 4 (Dermal), H312

Full text of H-statements: see section 16

### 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 breathing of fresh air. Allow the victim to rest.
- First-aid measures after skin contact : 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.

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

No additional information available

### 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 : Combustible liquid.
- Explosion hazard : May form flammable/explosive vapour-air mixture.

#### 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 : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

##### 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 : 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 : Contain released substance, pump into suitable containers.
- 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.

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### 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. No open flames. No smoking.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in original container in a cool well ventilated area. Keep container closed when not in use.  
Incompatible products : Strong bases. Strong acids.  
Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.  
Storage temperature : 25 (5 - 42) °C

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Encapture	
ACGIH	Not applicable
OSHA	Not applicable
dimethyl sulfoxide (67-68-5)	
ACGIH	Not applicable
OSHA	Not applicable
2(2-aminoethoxy)ethanol (929-06-6)	
ACGIH	Not applicable
OSHA	Not applicable

#### 8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.  
  
Hand protection : Wear protective gloves.  
Eye protection : 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  
Colour : Green  
Odour : Characteristic odour  
Odour threshold : No data available  
pH :  $\geq 7.5$  (7 - 9)  
Melting point : No data available  
Freezing point :  $\leq 0$  °C  
Boiling point :  $\geq 189$  °C  
Flash point : 107 °C  
Relative evaporation rate (butylacetate=1) : No data available  
Flammability (solid, gas) : No data available  
Explosive limits : No data available  
Explosive properties : No data available  
Oxidising properties : No data available  
Vapour pressure : No data available  
Relative density : No data available

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Relative vapour density at 20 °C	: No data available
Density	: 1.159 g/ml
Solubility	: Soluble in water. Water: Solubility in water of component(s) of the mixture : • dimethyl sulfoxide: 100 g/100ml (25 °C) • cyanoguanidine: 3.2 g/100ml
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Not established. Combustible liquid.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

### 10.5. Incompatible materials

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

dimethyl sulfoxide (67-68-5)	
LD50 dermal rat	40000 mg/kg bodyweight (Rat; Experimental value)
ATE US (dermal)	40000.000 mg/kg bodyweight

2(2-aminoethoxy)ethanol (929-06-6)	
LD50 oral rat	3000 mg/kg (Rat)
LD50 dermal rabbit	1250 mg/kg (Rabbit)
ATE US (oral)	3000.000 mg/kg bodyweight
ATE US (dermal)	1250.000 mg/kg bodyweight

Skin corrosion/irritation : Causes skin irritation.  
pH: >= 7.5 (7 - 9)

Serious eye damage/irritation : Not classified  
pH: >= 7.5 (7 - 9)

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

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Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general	: Not classified as dangerous for the environment according to the criteria of Directive 67/548/EEC. The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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#### 12.2. Persistence and degradability

Encapture	
Persistence and degradability	Biodegradable in the soil. Not established.
dimethyl sulfoxide (67-68-5)	
Persistence and degradability	Not readily biodegradable in water. Photolysis in the air.
2(2-aminoethoxy)ethanol (929-06-6)	
Persistence and degradability	Biodegradability in water: no data available.

#### 12.3. Bioaccumulative potential

Encapture	
Bioaccumulative potential	Not established.
dimethyl sulfoxide (67-68-5)	
BCF fish 1	< 0.4 (BCF)
Log Pow	-1.35 (Experimental value; 20 °C)
Bioaccumulative potential	Bioaccumulation: not applicable.
2(2-aminoethoxy)ethanol (929-06-6)	
Bioaccumulative potential	No bioaccumulation data available.

#### 12.4. Mobility in soil

Encapture	
Ecology - soil	Not toxic to plants.
dimethyl sulfoxide (67-68-5)	
Surface tension	0.0435 N/m (20 °C; 10 g/l)
Log Koc	Koc, SRC PCKOCWIN v1.66; 4.41; Calculated value; log Koc; SRC PCKOCWIN v1.66; 0.64; Calculated value

#### 12.5. Other adverse effects

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

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations	: Dispose of contents/containers in hazardous or special waste collection point, an approved disposal plant, a licensed hazardous waste disposal contractor or authorized waste collection site in accordance with local, regional and/or international regulation, except for empty clean containers which can be disposed of as non hazardous waste.
Ecology - waste materials	: Avoid release to the environment.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT  
Not regulated for transport

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### 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

#### dimethyl sulfoxide (67-68-5)

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

#### 2(2-aminoethoxy)ethanol (929-06-6)

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

### 15.2. International regulations

#### CANADA

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WHMIS Classification This product does not require hazardous labeling or symbols

### EU-Regulations

No additional information available

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

No additional information available

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

Not classified

### National regulations

No additional information available

### 15.3. US State regulations

#### dimethyl sulfoxide (67-68-5)

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

#### 2(2-aminoethoxy)ethanol (929-06-6)

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

## SECTION 16: Other information

Revision date : 02/16/2017

Other information : None.

Full text of H-statements:

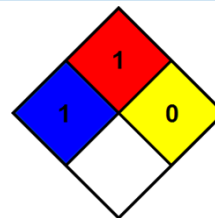
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Flam. Liq. 4	Flammable liquids, Category 4
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H227	Combustible liquid
H312	Harmful in contact with skin
H315	Causes skin irritation

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NFPA health hazard	: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard	: 1 - Must be preheated before ignition can occur.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.
NFPA specific hazard	: None



HMIS III Rating	
Health	: 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability	: 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)
Physical	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal Protection	: C C - Safety glasses, Gloves, Synthetic apron

SDS US (GHS HazCom 2012)

*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*