

A.O.E. Animal Odor Eliminator

Safety Data Sheet

SECTION 1: Identification

1.1. Identification

Product name : A.O.E. Animal Odor Eliminator

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Deodorizer

1.3. Supplier

Thornell Corporation
100 James Street
Smithville, MO 64089
T 888-873-3442

1.4. Emergency telephone number

Emergency number : 816-873-3342

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labeling

No labeling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Water	CAS-No.: 7732-18-5	≥ 98
Alcohols, C9-11, ethoxylated	CAS-No.: 68439-46-3	≤ 15.55
.alpha.-Terpineol	CAS-No.: 98-55-5	≤ 2.8
Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	CAS-No.: 68391-01-5	≤ 2

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Name	Product identifier	%
Ethyl alcohol	CAS-No.: 64-17-5	≤ 1
Coumarin	CAS-No.: 91-64-5	≤ 0.5
Spearmint oil	CAS-No.: 8008-79-5	≤ 0.5
Vanillin	CAS-No.: 121-33-5	≤ 0.35
Methyl salicylate	CAS-No.: 119-36-8	≤ 0.11
Cedarwood oil, Virginian	CAS-No.: 85085-41-2	≤ 0.1
Isoamyl salicylate	CAS-No.: 87-20-7	≤ 0.07

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	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms	: Not expected to present a significant hazard under anticipated conditions of normal use.
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4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use suitable extinguishing media for surrounding fire.
Unsuitable extinguishing media	: None

5.2. Specific hazards arising from the chemical

Fire hazard	: Not flammable.
Explosion hazard	: None anticipated.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

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.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No special measures needed.

6.1.1. For non-emergency personnel

Emergency procedures : No special measures needed.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. 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

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. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : None.

Precautions for safe handling : Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Hygiene measures : Wash hands, forearms and face thoroughly after handling. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Vanillin (121-33-5)

USA - AIHA - Occupational Exposure Limits

WEEL TWA	10 mg/m ³
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Ethyl alcohol (64-17-5)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL STEL	1000 ppm
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Ethyl alcohol (64-17-5)

ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
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USA - OSHA - Occupational Exposure Limits

OSHA PEL TWA	1900 mg/m ³
	1000 ppm

USA - IDLH - Occupational Exposure Limits

IDLH	3300 ppm (10% LEL)
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USA - NIOSH - Occupational Exposure Limits

NIOSH REL (TWA)	1900 mg/m ³
	1000 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Clear
Odor	: Fragrant
Odor threshold	: No data available
pH	: 7
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: >200 F
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available

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Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Not applicable.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Water (7732-18-5)

LD50 oral rat	> 90 ml/kg
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Alcohols, C9-11, ethoxylated (68439-46-3)

LD50 oral rat	1400 mg/kg
ATE US (oral)	1378 mg/kg

.alpha.-Terpineol (98-55-5)

LD50 oral rat	5170 mg/kg
ATE US (oral)	5170 mg/kg body weight

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Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides (68391-01-5)

LD50 oral rat	850 mg/kg
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LD50 dermal rabbit	2300 mg/kg
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Coumarin (91-64-5)

LD50 oral rat	> 5000 mg/kg
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LD50 dermal rabbit	> 2000 mg/kg
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ATE US (oral)	500 mg/kg body weight
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Spearmint oil (8008-79-5)

LD50 oral rat	5 g/kg
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ATE US (oral)	5000 mg/kg body weight
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Vanillin (121-33-5)

LD50 oral rat	1580 mg/kg
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LD50 dermal rabbit	> 5010 mg/kg
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ATE US (oral)	1580 mg/kg body weight
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Methyl salicylate (119-36-8)

LD50 oral rat	887 mg/kg
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LD50 dermal rabbit	> 5000 mg/kg
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ATE US (oral)	887 mg/kg body weight
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Ethyl alcohol (64-17-5)

LD50 oral rat	7060 mg/kg
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LC50 Inhalation - Rat	124.7 mg/l/4h
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ATE US (oral)	7060 mg/kg
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Skin corrosion/irritation	: Not classified
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Serious eye damage/irritation	: Not classified
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Respiratory or skin sensitization	: Not classified
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Germ cell mutagenicity	: Not classified
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Carcinogenicity	: Not classified
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Coumarin (91-64-5)

IARC group	3 - Not classifiable
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National Toxicology Program (NTP) Status	Evidence of Carcinogenicity
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Ethyl alcohol (64-17-5)

IARC group	1 - Carcinogenic to humans
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In OSHA Hazard Communication Carcinogen list	Yes
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Reproductive toxicity	: Not classified
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STOT-single exposure	: Not classified
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STOT-repeated exposure	: Not classified
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Aspiration hazard	: Not classified
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. Harmful to aquatic life with long lasting effects.

Vanillin (121-33-5)

LC50 - Fish [1]	53 – 61.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 - Fish [2]	88 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
NOEC (acute)	10000 mg/kg (Exposure time: 42 Days - Species: Eisenia foetida [soil dry weight])

Ethyl alcohol (64-17-5)

LC50 - Fish [1]	12 – 16 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 - Crustacea [1]	9268 – 14221 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 - Fish [2]	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [2]	2 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

12.2. Persistence and degradability

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Persistence and degradability	Not established.
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Water (7732-18-5)

Persistence and degradability	Rapidly degradable
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Alcohols, C9-11, ethoxylated (68439-46-3)

Persistence and degradability	Rapidly degradable
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.alpha.-Terpineol (98-55-5)

Persistence and degradability	Rapidly degradable
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Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides (68391-01-5)

Persistence and degradability	Rapidly degradable
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Coumarin (91-64-5)

Persistence and degradability	Rapidly degradable
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Spearmint oil (8008-79-5)

Persistence and degradability	Rapidly degradable
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Vanillin (121-33-5)

Persistence and degradability	Rapidly degradable
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Methyl salicylate (119-36-8)

Persistence and degradability	Rapidly degradable
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Cedarwood oil, Virginian (85085-41-2)

Persistence and degradability	Rapidly degradable
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Ethyl alcohol (64-17-5)

Persistence and degradability	Rapidly degradable
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Isoamyl salicylate (87-20-7)

Persistence and degradability	Rapidly degradable
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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Vanillin (121-33-5)

Partition coefficient n-octanol/water (Log Pow)	1.23 (at 22 °C)
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Methyl salicylate (119-36-8)

Partition coefficient n-octanol/water (Log Pow)	2.55
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Ethyl alcohol (64-17-5)

Partition coefficient n-octanol/water (Log Pow)	-0.32
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

UN-No.(DOT)	: Not applicable
UN-No. (TDG)	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable

14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Not applicable
Proper Shipping Name (TDG)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT)	: Not applicable
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TDG

Transport hazard class(es) (TDG) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable

Packing group (TDG) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

Not applicable

TDG

Not applicable

IMDG

Not applicable

IATA

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Water	7732-18-5	Present	Active	
Alcohols, C9-11, ethoxylated	68439-46-3	Present	Active	XU
.alpha.-Terpineol	98-55-5	Present	Active	
Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	68391-01-5	Present	Active	
Coumarin	91-64-5	Present	Active	
Spearmint oil	8008-79-5	Present	Active	
Vanillin	121-33-5	Present	Active	
Methyl salicylate	119-36-8	Present	Active	
Cedarwood oil, Virginian	85085-41-2	Not present	-	

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Name	CAS-No.	Listing	Commercial status	Flags
Ethyl alcohol	64-17-5	Present	Active	
Isoamyl salicylate	87-20-7	Not present	-	

15.2. US State regulations

Ethyl alcohol (64-17-5)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	Yes	No	No		

Component	State or local regulations
Methyl salicylate(119-36-8)	U.S. - Pennsylvania - RTK (Right to Know) List
Ethyl alcohol(64-17-5)	U.S. - Massachusetts - Right To Know List; U.S. - Minnesota - Hazardous Substance List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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.