

| | |
|--------------|---|
| HEALTH | 0 |
| FLAMMABILITY | 0 |
| REACTIVITY | 0 |

Section 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

| | |
|----------------|--------------------------|
| Product Name | Ambroxan, Natural |
| Product Number | 0347100 |
| CAS-No. | 3738-00-9 |

1.2 Product Recommended Use

Flavorings

1.3 Preparation Information

| | |
|-----------|---|
| Company | Aurochemicals 7 Nicoll Street Washingtonville, NY 10992 |
| Telephone | 845-496-6065 |
| Fax | 845-496-6248 |

1.4 Emergency Telephone Number

1-800-535-5053
International - 1-352-323-3500 collect

Section 2: HAZARD(s) IDENTIFICATION

2.1 Classification of substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS): Not a hazardous substance or mixture

2.2 GHS Label Elements, Including precautionary statements

| | |
|----------------------------|------|
| Pictogram | None |
| Signal Statement | None |
| Hazard Statement(s) | None |
| Precautionary Statement(s) | None |

.3 HNOC (Hazards not otherwise classified or not covered by GHS -None)

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

| | |
|------------------|---|
| Synonyms | 1,4,4,9-Tetramethyl-13-oxatricyclo[8.3.04,9] tridecane (â) Ambroxide (-) Ambrox (-) Ambroxan |
| Formula | C ₁₆ H ₂₈ O |
| Molecular Weight | 236.39 g/mol |

CAS-No 3738-00-9
EC-No. 229-861-2

No ingredients are hazardous according to OSHA criteria.
No components need to be disclosed according to the applicable regulations

Section 4: FIRST AID MEASURES

4.1 Description of first aid measures

| | |
|-------------------------|--|
| Inhalation | Provide fresh air; keep at rest and at a comfortable position to breathe. |
| Contact with skin: | Remove contaminated clothing. Rinse skin with cool water then wash with mild soap and warm water. |
| Contact with eyes: | Rinse thoroughly with plenty of water for at least 15 as a precaution. |
| Ingestion | DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. |
| Clothing contamination: | Remove contaminated clothing and wash before reuse. |

4.2 **Most important symptoms and effects both acute and delayed** See section 2.2 and or section 11

4.3 **Indication of any immediate medical attention and special treatment needed.** No data available

Section 5: FIREFIGHTING MEASURES

| | |
|--|---|
| 5.1 Extinguishing Media Suitable Extinguishing Media | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide |
| 5.2 Special hazards arising from the substance or mixture | Carbon oxides |
| 5.3 Advice for fire fighters | Wear self contained breathing apparatus for firefighting if necessary. |
| 5.4 Further information | No data available |

Section 6: ACCIDENTAL RELEASE MEASURES

| | |
|--|--|
| 6.1 Personal precautions, protective equipment and emergency procedures | Avoid dust formation. Avoid breathing vapors, mist or gas. |
| 6.2 Environment precautions | Prevent further leakage or spillage if safe to do so. Do not allow to enter drains or sewage system. |

Safety Data Sheet

- 6.3 Methods and materials for containment and clean up** Contain spillage. Sweep up with broom and shovel. Place in a suitable, closed container for disposal.
- 6.4 Specific end use(s)** Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

Section 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling** Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide adequate ventilation at places where dust is formed.
- 7.2 Conditions for Safe storage** Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- 7.3 Specific End use(s)** Flavorings

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limits

Appropriate Engineering Controls Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and at the end of the day.

Personal protective equipment

These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. They should not be construed as offering an approval for any specific use scenario.

Eye/face protection Wear appropriate safety glasses with side shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection Wear chemically resistant, rubber gloves when handling this product.. Use proper glove removal techniques (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use. Wash and dry hands.

Body protection Impervious clothing protecting against chemicals, should be selected specifically for the work place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure Prevent further leakage or spillage if safe to do so. Do not let product enter drains

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | | |
|---|--|--|
| a | Appearance | White to light cream crystals |
| b | Odor | Strongly amber, woody, dry notes |
| c | Odor Threshold | No data available |
| d | pH | No data available |
| e | Melting Point /Freezing Point | 75-78°C |
| f | Boiling Point | No data available |
| g | Flash Point | No data available |
| h | Evaporation Rate | No data available |
| i | Flammability (Solid, Gas) | No data available |
| j | Upper/lower Flammability Limit | No data available |
| k | Vapor pressure | No data available |
| l | Vapor density | No data available |
| m | Relative density at 25°C | No data available |
| n | Solubility | Soluble in ethanol, insoluble in water |
| o | Partition coefficient: n-octanol/water | No data available |
| p | Auto-ignition Temp. | No data available |
| q | Decomposition Temp. | No data available |
| r | Viscosity | No data available |
| s | Explosive properties | No data available |
| t | Oxidizing properties | No data available |

9.2 Other Safety Information 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 data available |
| 10.4 | Conditions to avoid | No data available |
| 10.5 | Incompatible materials | Strong Oxidizing Agents |
| 10.6 | Hazardous decomposition products | No data available |
| 10.7 | Further Information | No data available |

Section 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

| | |
|-----------------|-------------------|
| LD50-Oral | No data available |
| LC50-Inhalation | No data available |
| LD50-Dermal | No data available |

| | |
|-----------------------------------|-------------------|
| Skin corrosion/irritation | No data available |
| Serious eye damage/eye irritation | No data available |
| Respiratory or skin sensitization | No data available |
| Germ Cell mutagenicity | No data available |

Carcinogenicity

IARC No component of this product, present levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH No component of this product, present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP No component of this product, present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA No component of this product, present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

| | |
|---|-------------------|
| Reproductive toxicity | No data available |
| Teratogenicity | No data available |
| Specific target organ toxicity-single exposure (GHS) | No data available |
| Specific target organ toxicity-repeated exposures (GHS) | No data available |
| Aspiration Hazards | No data available |

Signs and Symptoms of Exposure To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

Synergistic effect No data available

RTECS: Not available

Section 12: ECOLOGICAL INFORMATION

| | | |
|------|------------------------------------|--|
| 12.1 | Toxicity | No data available |
| 12.2 | Persistence and degradability | No data available |
| 12.3 | Bioaccumulative potential | No data available |
| 12.4 | Mobility in soil | No data available |
| 12.5 | Results of PBT and vPvB assessment | PBT/vPvB assessment not available as chemical safety assessment not required / not conducted |
| 12.6 | Other adverse effects | No data available |

Section 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods

| | |
|-----------|--------------------------------|
| Product: | According to local regulations |
| Packaging | According to local regulations |

Section 14: TRANSPORT INFORMATION

| | |
|----------|---------------------|
| DOT (US) | Not dangerous goods |
| IMDG | Not dangerous goods |
| IATA | Not dangerous goods |

Section 15: REGULATORY INFORMATION

| | | | |
|--|--|----------------|------------|
| Reach No. | A registration number is not available for this substance as its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline. | | |
| SARA 302 Components | No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302 | | |
| SARA 313 Components | This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. | | |
| SARA 311/312 Hazards | No SARA Hazards | | |
| Massachusetts Right to Know components | No components are subject to the Massachusetts Right to Know Act | | |
| Pennsylvania Right to Know components | (-)-Ambroxide | CAS# 6790-58-5 | Rev. Date: |
| New Jersey Right to Know components | (-)-Ambroxide | CAS# 6790-58-5 | Rev. Date: |
| California Prop. 65 components | This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. | | |

Section 16: OTHER INFORMATION

HMIS Rating

Health hazard 0
Chronic Health Hazard
Flammability 0
Physical Hazard 0

Further Information

Aurochemicals provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. Aurochemicals makes no representations or warranties, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Aurochemicals will not be responsible, nor held liable, for damages resulting from use of or reliance upon this information.

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