

Safety Data Sheet

acc. to OSHA HCS (29 CFR § 1910.1200)

Printing date 01/16/2024

Reviewed on 01/16/2024

1 Identification

- **Product identifier**
- **Trade name: Rum Ether Type Natural**
- **Product number:** 1206
- **Application of the substance / the mixture** Flavoring Ingredients
- **Details of the supplier of the safety data sheet**
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- **Manufacturer/Supplier:**
 Advanced Biotech
 10 Taft Road
 Totowa, NJ 07512 USA
- **Information department:**
 Product Safety Department
 productsafety@adv-bio.com
- **Emergency telephone number:**
 Infotrac: 1-800-535-5053 (Domestic) & 1-352-323-3500 (International)
 Email: responders@infotrac.net & During normal business hours: 1-973-339-6242

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids 3 H226 Flammable liquid and vapor.



GHS08 Health hazard

Carcinogenicity 1B H350 May cause cancer.



GHS07

Eye Irritation 2A H319 Causes serious eye irritation.

- **GHS label elements**

Pictograms on label shall be in the shape of a square set at a point and shall include a black hazard symbol on a white background with a red frame sufficiently wide to be clearly visible.

The product is classified and labeled according to the Globally Harmonized System (GHS).

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· **Hazard pictograms**



GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

Acetaldehyde

· **Hazard statements**

H226 Flammable liquid and vapor.

H319 Causes serious eye irritation.

H350 May cause cancer.

· **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 3

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = *2

Fire = 3

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

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· Dangerous components:		
CAS: 64-17-5 EINECS: 200-578-6	Ethanol ⚠ Flammable Liquids 2, H225; ⚠ Eye Irritation 2A, H319	25-50%
CAS: 75-07-0 EINECS: 200-836-8	Acetaldehyde ⚠ Flammable Liquids 1, H224; ⚠ Germ Cell Mutagenicity 2, H341; Carcinogenicity 1B, H350; ⚠ Acute Toxicity - Oral 4, H302; Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H335	≥0.1-<1%

4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.
- **Additional information**
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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· **Protective Action Criteria for Chemicals**

· **PAC-1:**

CAS: 64-17-5	Ethanol	1,800 ppm
CAS: 75-07-0	Acetaldehyde	45 ppm
CAS: 64-19-7	Acetic acid	5 ppm
CAS: 105-37-3	Ethyl propionate	6.3 ppm
	α-Furfuraldehyde	2 ppm
CAS: 141-78-6	Ethyl acetate	1,200 ppm
CAS: 67-56-1	Methanol	530 ppm
CAS: 67-64-1	acetone	200 ppm
CAS: 79-09-4	Propionic acid	15 ppm
CAS: 79-20-9	Methyl acetate	250 ppm
CAS: 107-18-6	allyl alcohol	0.09 ppm
CAS: 109-94-4	Ethyl formate	100 ppm

· **PAC-2:**

CAS: 64-17-5	Ethanol	3300* ppm
CAS: 75-07-0	Acetaldehyde	270 ppm
CAS: 64-19-7	Acetic acid	35 ppm
CAS: 105-37-3	Ethyl propionate	69 ppm
	α-Furfuraldehyde	10 ppm
CAS: 141-78-6	Ethyl acetate	1,700 ppm
CAS: 67-56-1	Methanol	2,100 ppm
CAS: 67-64-1	acetone	3200* ppm
CAS: 79-09-4	Propionic acid	28 ppm
CAS: 79-20-9	Methyl acetate	1,700 ppm
CAS: 107-18-6	allyl alcohol	1.7 ppm
CAS: 109-94-4	Ethyl formate	1,300 ppm

· **PAC-3:**

CAS: 64-17-5	Ethanol	15000* ppm
CAS: 75-07-0	Acetaldehyde	840 ppm
CAS: 64-19-7	Acetic acid	250 ppm
CAS: 105-37-3	Ethyl propionate	410 ppm
	α-Furfuraldehyde	100 ppm
CAS: 141-78-6	Ethyl acetate	10000** ppm
CAS: 67-56-1	Methanol	7200* ppm
CAS: 67-64-1	acetone	5700* ppm
CAS: 79-09-4	Propionic acid	170 ppm
CAS: 79-20-9	Methyl acetate	10000* ppm
CAS: 107-18-6	allyl alcohol	13 ppm
CAS: 109-94-4	Ethyl formate	8000* ppm

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7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
 Ensure good ventilation/exhaustion at the workplace.
 Open and handle receptacle with care.
- **Information about protection against explosions and fires:**
 Keep ignition sources away - Do not smoke.
 Protect against electrostatic charges.
 Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 No special requirements.
 Please refer to the product specification and/or Certificate of Analysis for product storage requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

CAS: 64-17-5 Ethanol	
PEL	Long-term value: 1900 mg/m ³ , 1000 ppm
REL	Long-term value: 1900 mg/m ³ , 1000 ppm
TLV	Short-term value: 1000 ppm
	A3
CAS: 75-07-0 Acetaldehyde	
PEL	Long-term value: 360 mg/m ³ , 200 ppm
REL	See Pocket Guide Apps. A and C
TLV	Ceiling limit value: 25 ppm
	A2

- **Additional information:** The lists that were valid during the creation were used as a basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Store protective clothing separately.
 Avoid contact with the eyes.
 Avoid contact with the eyes and skin.
- **Breathing equipment:**
 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material should be based on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be determined by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· **Form:**

Liquid

· **Color:**

According to product specification

· **Odor:**

According to product specification

· **Odor threshold:**

Not determined.

· **pH-value:**

Not determined.

· **Change in condition**

· **Melting point/Melting range:**

Undetermined.

· **Boiling point/Boiling range:**

Undetermined.

· **Flash point:**

25.4 °C (77.7 °F)

· **Flammability (solid, gaseous):**

Flammable.

· **Auto igniting:**

425 °C (797 °F)

· **Decomposition temperature:**

Not determined.

· **Ignition temperature:**

Product is not selfigniting.

· **Danger of explosion:**

Product is not explosive. However, formation of explosive air/ vapor mixtures are possible.

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· Explosion limits:	
Lower:	3.5 Vol %
Upper:	15 Vol %
· Vapor pressure at 20 °C (68 °F):	59 hPa (44.3 mm Hg)
· Vapor pressure at 50 °C (122 °F):	280 hPa (210 mm Hg)
· Density at 20 °C (68 °F):	0.95-0.98 g/cm ³ (7.92775-8.1781 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	30.5 %
Water:	70.0 %
VOC content:	30.54 %
	290.1-299.3 g/l / 2.42-2.5 lb/gal
Solids content:	0.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:

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Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

CAS: 64-17-5	Ethanol	1
CAS: 75-07-0	Acetaldehyde	2B
	α-Furfuraldehyde	3

· **NTP (National Toxicology Program)**

CAS: 75-07-0	Acetaldehyde	R
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· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number	
· DOT, IMDG, IATA	UN1197
· UN proper shipping name	
· DOT	Extracts, flavoring, liquid
· IMDG	EXTRACTS, LIQUID

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· IATA	Extracts, liquid
· Transport hazard class(es)	
· DOT	
	
· Class	3 Flammable liquids
· Label	3
<hr/>	
· IMDG, IATA	
	
· Class	3 Flammable liquids
· Label	3
· Packing group	
· DOT, IMDG, IATA	III
· Environmental hazards:	Not applicable.
· Special precautions for user	Warning: Flammable liquids
· Hazard identification number (Kemler code):	30
· EMS Number:	F-E,S-D
· Stowage Category	A
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L
<hr/>	
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1197 EXTRACTS, LIQUID, 3, III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

· Section 355 (extremely hazardous substances):

CAS: 107-18-6 | allyl alcohol

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Section 313 (Specific toxic chemical listings):	
CAS: 75-07-0	Acetaldehyde
CAS: 67-56-1	Methanol
CAS: 107-18-6	allyl alcohol

TSCA (Toxic Substances Control Act):
All components have the value ACTIVE.

Hazardous Air Pollutants	
CAS: 75-07-0	Acetaldehyde
CAS: 67-56-1	Methanol

Proposition 65	
Chemicals known to cause cancer:	
CAS: 75-07-0	Acetaldehyde

Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	

Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	

Chemicals known to cause developmental toxicity:	
CAS: 64-17-5	Ethanol
CAS: 67-56-1	Methanol

Carcinogenic categories		
EPA (Environmental Protection Agency)		
CAS: 75-07-0	Acetaldehyde	B2
CAS: 67-64-1	acetone	I

TLV (Threshold Limit Value)		
CAS: 64-17-5	Ethanol	A3
CAS: 75-07-0	Acetaldehyde	A3
	α-Furfuraldehyde	A3
CAS: 67-64-1	acetone	A4
CAS: 107-18-6	allyl alcohol	A4

NIOSH-Ca (National Institute for Occupational Safety and Health)	
CAS: 75-07-0	Acetaldehyde

GHS label elements
Pictograms on label shall be in the shape of a square set at a point and shall include a black hazard symbol on a white background with a red frame sufficiently wide to be clearly visible.
The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS02 GHS07 GHS08

Signal word Danger

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· **Hazard-determining components of labeling:**

Acetaldehyde

· **Hazard statements**

H226 Flammable liquid and vapor.

H319 Causes serious eye irritation.

H350 May cause cancer.

· **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H224 Extremely flammable liquid and vapor.

H225 Highly flammable liquid and vapor.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

· **Department issuing SDS:** Product Safety Department

· **Contact:**

Product Safety Department

productsafety@adv-bio.com

· **Date of preparation / last revision** 01/16/2024

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flammable Liquids 1: Flammable liquids – Category 1

Flammable Liquids 2: Flammable liquids – Category 2

Flammable Liquids 3: Flammable liquids – Category 3

Acute Toxicity - Oral 4: Acute toxicity – Category 4

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Germ Cell Mutagenicity 2: Germ cell mutagenicity – Category 2

Carcinogenicity 1B: Carcinogenicity – Category 1B

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3

US

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