

Printing date 01/16/2024 Reviewed on 01/10/2023

1 Identification

· Product identifier

· Trade name: Rum Ether (R Type) natural

· Product number: 1647

· 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 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Carcinogenicity 1B H350 May cause cancer.



GHS07

Eye Irritation 2A

H319 Causes serious eye irritation.

Specific Target Organ Toxicity - Single Exposure 3 H336 May cause drowsiness or dizziness.

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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Safety Data Sheet acc. to OSHA HCS (29 CFR § 1910.1200)

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· Hazard pictograms





GHS02 GHS07

- · Signal word Danger
- · Hazard-determining components of labeling:

Ethyl acetate

Acetaldehyde

· Hazard statements

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H350 May cause cancer.

H336 May cause drowsiness or dizziness.

· Precautionary statements

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

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 = 3Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *2 Fire = 3

- · 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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	`	tion of page
· Dangerous compor	nents:	
CAS: 64-17-5 EINECS: 200-578-6	Ethanol Flammable Liquids 2, H225; Eye Irritation 2A, H319	25-50%
CAS: 141-78-6 EINECS: 205-500-4	Ethyl acetate Flammable Liquids 2, H225; Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H336	25-50%
CAS: 105-37-3 EINECS: 203-291-4	Ethyl propionate Flammable Liquids 2, H225; Skin Irritation 2, H315; Specific Target Organ Toxicity - Single Exposure 3, H335	≤2.5%
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-<19

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.

- 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:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

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· 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.

Protective Action Criteria for Chemicals

DAO 4:		
· PAC-1:		
CAS: 64-17-5	Ethanol	1,800 ppn
CAS: 141-78-6	Ethyl acetate	1,200 ppn
CAS: 105-37-3	Ethyl propionate	6.3 ppm
CAS: 75-07-0	Acetaldehyde	45 ppm
	α-Furfuraldehyde	2 ppm
· PAC-2:		
CAS: 64-17-5	Ethanol	3300* ppr
CAS: 141-78-6	Ethyl acetate	1,700 ppn
CAS: 105-37-3	Ethyl propionate	69 ppm
CAS: 75-07-0	Acetaldehyde	270 ppm
	α-Furfuraldehyde	10 ppm
· PAC-3:		·
CAS: 64-17-5	Ethanol	15000* ppm
CAS: 141-78-6	Ethyl acetate	10000** ppr
CAS: 105-37-3	Ethyl propionate	410 ppm
CAS: 75-07-0	Acetaldehyde	840 ppm
	α-Furfuraldehyde	100 ppm

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

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: Store in a cool location.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

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· 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:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

	o anno, ano romanimi gi concentacina na micromi cosperativo minico
CAS	: 64-17-5 Ethanol
PEL	Long-term value: 1900 mg/m³, 1000 ppm
REL	Long-term value: 1900 mg/m³, 1000 ppm
TLV	Short-term value: 1000 ppm A3
CAS	: 141-78-6 Ethyl acetate
PEL	Long-term value: 1400 mg/m³, 400 ppm
REL	Long-term value: 1400 mg/m³, 400 ppm
TLV	Long-term value: 400 ppm
CAS	75-07-0 Acetaldehyde
PEL	Long-term value: 360 mg/m³, 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.

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

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· Material of gloves

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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
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· 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:** 19.6 °C (67.3 °F)

· Flammability (solid, gaseous): Highly flammable.

• Auto igniting: $425 \,^{\circ}\text{C} (797 \,^{\circ}\text{F})$

· 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.

· Explosion limits:

Lower: 3.5 Vol % **Upper:** 15 Vol %

· Vapor pressure at 20 °C (68 °F): 59 hPa (44.3 mm Hg)

• **Density at 20 °C (68 °F):** 0.915 g/cm³ (7.63568 lbs/gal)

Relative densityVapor densityEvaporation rateNot determined.Not determined.Not determined.

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(Continuation of page 6) · Solubility in / Miscibility with Water: Fully miscible. · Partition coefficient (n-octanol/water): Not determined. · Viscosity: Dynamic: Not determined. **Kinematic:** Not determined. · Solvent content: Organic solvents: 65.7 % Water: 32.3 % **VOC** content: 65.67 % 600.9 g/l / 5.01 lb/gal · 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:

İrritant

· Carcinogenic categories

A	ů .	
· IARC (Interna	tional Agency for Research on Cancer)	
CAS: 64-17-5	Ethanol	1
CAS: 75-07-0	Acetaldehyde	2B
	α-Furfuraldehyde	3
· NTP (Nationa	l 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.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information	
· UN-Number · DOT, IMDG, IATA	UN1170
· UN proper shipping name	
DOT	Ethanol solutions
· IMDG	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
· IATA	ETHANOL SOLUTION

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· Transport hazard class(es)

· DOT



· Class 3 Flammable liquids

· Label 3

· IMDG, IATA



· Class 3 Flammable liquids

· Label

· Packing group

· DOT, IMDG, IATA

· Environmental hazards:

· Marine pollutant: No

· Special precautions for user Warning: Flammable liquids

· Hazard identification number (Kemler code): 33

· 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: 5 L

On cargo aircraft only: 60 L

· IMDG

· Limited quantities (LQ) 1L

· Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

· UN "Model Regulation": UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL

SOLUTION), 3, II

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture · Sara
- Section 355 (extremely hazardous substances):

None of the ingredients is listed.

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Section 313 (Specific toxic chemical listings):

CAS: 75-07-0 Acetaldehyde

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

CAS: 75-07-0 Acetaldehyde

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

· Carcinogenic categories

· EPA (Environmental Protection Agency)					
CAS: 75-07-0 A	Acetaldehyde			_	B2
· TLV (Threshold	d Limit Value)				
CAS: 64-17-5 E	thanol				A3
CAS: 75-07-0 A	Acetaldehyde				A3
0	x-Furfuraldehyde				A3

· 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

· Hazard-determining components of labeling:

Ethyl acetate

Acetaldehyde

· Hazard statements

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H350 May cause cancer.

H336 May cause drowsiness or dizziness.

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· 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.

Store locked up. P405

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

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.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

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

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

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Flammable Liquids 2: Flammable liquids – Category 2 Acute Toxicity - Oral 4: Acute toxicity - Category 2

Skin Irritation 2: Skin corrosion/irritation - Category 2

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