

Date of issue: 01/24/2025 Reviewed on 01/24/2025

1 Identification

Product identifier

· Trade name: Whiskey Lactone 1% ETOH Natural

· Other means of identification

· Product number: 1907

· Application of the substance / the mixture Flavoring Ingredients

· Details of the supplier of the safety data sheet

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. Advanced Biotech makes NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the Advanced Biotech product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of an Advanced Biotech product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the Advanced Biotech product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

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.



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).

Hazard pictograms





GHS02 GHS07

· Signal word Danger

(Continued on page 2)



Date of issue: 01/24/2025 Reviewed on 01/24/2025

Trade name: Whiskey Lactone 1% ETOH Natural

(Continuation of page 1)

· Hazard statements

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

· Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smokina.

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 [or 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.

P403+P235 Store in a well-ventilated place. Keep cool.

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

regulations.

- Information pertaining to particular dangers for man and environment:
- Classification system:
- · NFPA ratings (scale 0 4)



Health = 2 Fire = 3

Reactivity = 0

· HMIS-ratings (scale 0 - 4)

HEALTH 2
FIRE 3
REACTIVITY 0

Health = 2 Fire = 3

Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB**: Not applicable.
- Classification according to (d)(1)(ii) of § 1910.1200

The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.

Hazards not otherwise classified

There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- Dangerous components:

CAS: 64-17-5 Ethanol

EINECS: 200-578-6

Flammable liquids 2, H225

50-100%

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.

(Continued on page 3)



Date of issue: 01/24/2025 Reviewed on 01/24/2025

Trade name: Whiskey Lactone 1% ETOH Natural

(Continuation of page 2)

· 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.
- 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.

· 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.

Protective Action Criteria for Chemicals

· PAC-1:	
CAS: 64-17-5 Ethanol	1,800 ppm
· PAC-2:	
CAS: 64-17-5 Ethanol	3300* ppm
· PAC-3:	
CAS: 64-17-5 Ethanol	15000* ppm
Reference to other sections	<u> </u>

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

(Continued on page 4)



Date of issue: 01/24/2025 Reviewed on 01/24/2025

Trade name: Whiskey Lactone 1% ETOH Natural

(Continuation of page 3)

Protect against electrostatic charges.

- · 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.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Control parameters
- · Components with limit values that require monitoring at the workplace:

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

- · Additional information: The lists that were valid during the creation were used as a basis.
- · Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- · 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.

Avoid contact with the eves.

Avoid contact with the eyes and skin.

- · Breathing equipment: Not required.
- 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.

(Continued on page 5)



Date of issue: 01/24/2025 Reviewed on 01/24/2025

Trade name: Whiskey Lactone 1% ETOH Natural

· Eye protection:

Tightly sealed goggles

(Continuation of page 4)

9 Physical and chemical properties

Information on basic physical and chemical properties

· General Information

· Physical state Liquid

Color: According to product specificationOdor: According to product specification

Odor threshold:
 Melting point/Melting range:
 Boiling point/Boiling range:
 Flammability:
 Not determined.
 Undetermined.
 Highly flammable.

· Explosion limits:

• Lower: 3.5 Vol %
• Upper: 15 Vol %

• Flash point:
• Auto igniting:
• Decomposition temperature:
• pH-value:
• PH-value:
• 15 Vol %
19.9 °C (67.8 °F)
425 °C (797 °F)
Not determined.

· Viscosity:

Kinematic: Not determined.Dynamic: Not determined.

· Solubility in / Miscibility with

Water: Fully miscible.
Partition coefficient (n-octanol/water): Not determined.
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): 0.8-0.83 g/cm³ (6.676-6.92635 lbs/gal)

· Relative density

Refractive Index

Vapor density
 Particle characteristics
 Not determined.
 Not applicable.

Other information

· Appearance:

· Form: Liquid

· Important information on protection of health

and environment, and on safety.

· **Ignition temperature:** Product is not selfigniting.

· Danger of explosion: Product is not explosive. However, formation of

Not determined.

explosive air/vapor mixtures are possible.

Solvent content:

· Organic solvents: 99.0 % · VOC content: 99.00 %

792-821.7 g/l / 6.61-6.86 lb/gal

(Continued on page 6)



Date of issue: 01/24/2025 Reviewed on 01/24/2025

Trade name: Whiskey Lactone 1% ETOH Natural

(Continuation of page 5)

· Solids content:

0.0 %

· Change in condition

· Evaporation rate

Not determined.

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:

Irritant

- · Interactive effects No interactive effects between components are known.
- · Carcinogenic categories

CAS: 64-17-5 Ethanol

I

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Alternative sources for toxicological information

No non-standard sources for toxicological information where used.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Results of PBT and vPvB assessment
- · PBT: Not applicable.

(Continued on page 7)



Date of issue: 01/24/2025 Reviewed on 01/24/2025

Trade name: Whiskey Lactone 1% ETOH Natural

(Continuation of page 6)

- · **vPvB:** Not applicable.
- Other adverse effects
- · 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.

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.

UN-Number	
DOT, IMDG, IATA	UN1170
UN proper shipping name	
DOT	Ethanol solution
IMDG	ETHANOL (ETHYL ALCOHOL) solution
IATA	ETHANOL solution
Transport hazard class(es)	
DOT	
RAMMAE 1000	
Class	3 Flammable liquids
Label	3
IMDG, IATA	
Class	3 Flammable liquids
Label	3
Packing group	
DOT, IMDG, IATA	



Date of issue: 01/24/2025 Reviewed on 01/24/2025

Trade name: Whiskey Lactone 1% ETOH Natural

(Continuation of page 7) · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. · Transport/Additional information: 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 · Special precautions for user Warning: Flammable liquids · Hazard identification number (Kemler code): 33 F-E,S-D · EMS Number: Stowage Category Α UN 1170 ETHANOL (ETHYL ALCOHOL) SOLUTION, UN "Model Regulation":

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.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

None of the ingredients is listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· 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)

None of the ingredients is listed.

(Continued on page 9)



Date of issue: 01/24/2025 Reviewed on 01/24/2025

Trade name: Whiskey Lactone 1% ETOH Natural

(Continuation of page 8)

· TLV (Threshold Limit Value)

CAS: 64-17-5 Ethanol

A3

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· 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

· Signal word Danger

Hazard statements

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

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 [or 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.

P403+P235 Store in a well-ventilated place. Keep cool.

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

regulations.

· 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

H225 Highly flammable liquid and vapor.

· Department issuing SDS: Product Safety Department

· Contact:

Product Safety Department productsafety@adv-bio.com

- Date of previous version 10/03/2023
- · Date of preparation 01/24/2025
- · 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

(Continued on page 10)



Date of issue: 01/24/2025 Reviewed on 01/24/2025

Trade name: Whiskey Lactone 1% ETOH Natural

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 2: Flammable liquids – Category 2 Eye irritation 2A: Serious eye damage/eye irritation – Category 2A

(Continuation of page 9)