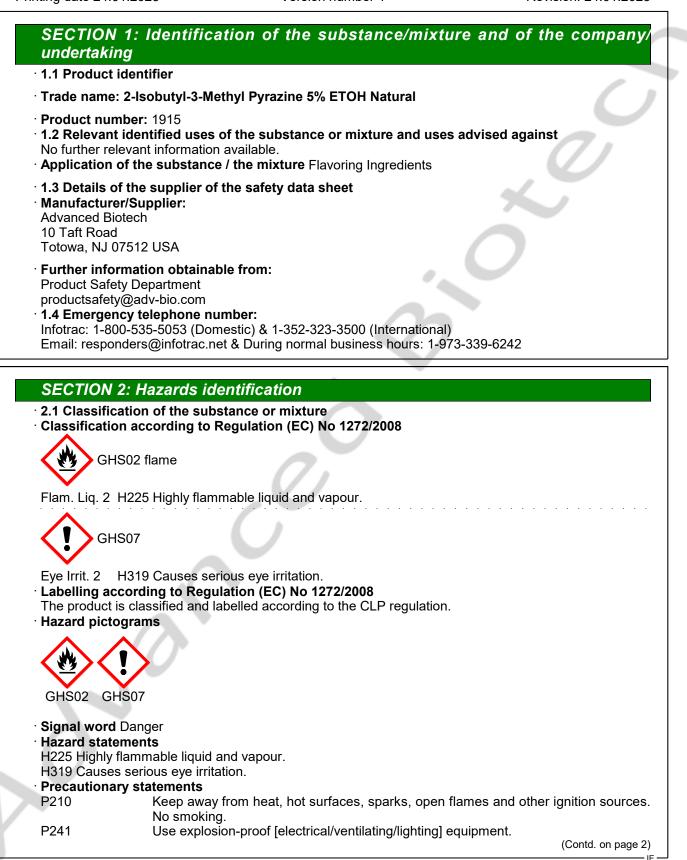


according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025





according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025

Trade name: 2-IsobutyI-3-Methyl Pyrazine 5% ETOH Natural

(Contd. of page 1) 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. • 2.3 Other hazards • Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

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

· Dangerous components:		
CAS: 64-17-5	Ethanol	50-100%
EINECS: 200-578-6	substance with a Community workplace exposure limit	
		≥2.5-<10%
EINECS: 237-693-6	Skin Irrit. 2, H315; Eye Irrit. 2, H319	
 Additional information: For the wording of the listed hazard phrases refer to section 16. 		

SECTION 4: First aid measures

• 4.1 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.

- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

- · Suitable extinguishing agents:
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: No special measures required.
- Additional information
- Cool endangered receptacles with water spray.

(Contd. on page 3)

IF



according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025

Trade name: 2-IsobutyI-3-Methyl Pyrazine 5% ETOH Natural

(Contd. of page 2) Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

• **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions: Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.
- 6.3 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.
- **6.4 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.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling No special precautions are necessary if used correctly.

• Information about fire - and explosion protection: Keep ignition sources away - Do not smoke. Protect against electrostatic charges.

- · 7.2 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 container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

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

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

CAS: 64-17-5 Ethanol

OEL Short-term value: 1000 ppm

• Additional information: The lists valid during the making were used as a basis.

- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as 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 eyes.

Avoid contact with the eyes and skin.

(Contd. on page 4)



Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025

Trade name: 2-IsobutyI-3-Methyl Pyrazine 5% ETOH Natural

(Contd. of page 3)

· Respiratory protection: Not required.

Hand protection



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/face protection



Tightly sealed goggles

9.1 Information on basic physical and	chemical properties
General Information	h
Physical state	Liquid
Colour:	According to product specification
Odour:	According to product specification
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point ar	nd boiling
range	Undetermined.
Flammability	Highly flammable.
Lower and upper explosion limit	
Lower:	2.6 Vol % (CAS: 57-55-6 Propylene glycol)
Upper:	12.6 Vol % (CAS: 57-55-6 Propylene glycol)
Flash point:	19.9 °C
Decomposition temperature:	Not determined.
pH	Not determined.
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Fully miscible.



according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025

Trade name: 2-IsobutyI-3-Methyl Pyrazine 5% ETOH Natural

	(Contd. of page 4)
· Vapour pressure at 20 °C:	0.1 hPa (CAS: 57-55-6 Propylene glycol)
Density and/or relative density	(, , , , , , , , , , , , , , , , , , ,
· Density at 20 °C:	0.81-0.83 g/cm ³
· Relative density	Not determined.
· Refractive Index	
· Vapour density	Not determined.
· 9.2 Other information	
· Appearance:	
· Form:	Liquid
· Important information on protection of he	alth
and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation of
	explosive air/vapour mixtures are possible.
· Solvent content:	
· Organic solvents:	95.0 %
· VOC (EC)	95.00 %
· Solids content:	0.0 %
· Change in condition	
· Evaporation rate	Not determined.
Information with regard to physical has	zard
classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Highly flammable liquid and vapour.
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
• Self-heating substances and mixtures	Void
Substances and mixtures, which emit	
flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.

(Contd. on page 6)

IE



according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025

(Contd. of page 5)

Trade name: 2-IsobutyI-3-Methyl Pyrazine 5% ETOH Natural

• **10.5 Incompatible materials:** No further relevant information available.

• **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Causes serious eye irritation.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- 12.5 Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (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.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packaging:

• **Recommendation:** Disposal must be made according to official regulations.

(Contd. on page 7)

IE



according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025

Trade name: 2-IsobutyI-3-Methyl Pyrazine 5% ETOH Natural

(Contd. of page 6)

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

· 14.1 UN number or ID number	
· ADR, IMDG, IATA	UN1170
[·] 14.2 UN proper shipping name	
ADR	1170 ETHANOL SOLUTION (ETHYL ALCOHO SOLUTION)
IMDG	ETHANOL SOLUTION (ETHYL ALCOHO SOLUTION)
ΙΑΤΑ	ETHANOL SOLUTION
[.] 14.3 Transport hazard class(es)	
ADR	
Class	3 (F1) Flammable liquids.
· Label	3
· IMDG, IATA	U.
Class	3 Flammable liquids.
	3
· 14.4 Packing group · ADR, IMDG, IATA	11
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user	Warning: Flammable liquids.
 Hazard identification number (Kemler code): EMS Number: 	33 F-E,S-D
Stowage Category	A
 14.7 Maritime transport in bulk according to IMO instruments 	Not applicable.
Transport/Additional information:	
· ADR	
· 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
· Transport category	2



Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025

Trade name: 2-IsobutyI-3-Methyl Pyrazine 5% ETOH Natural

	(Contd. of page 7)
 Tunnel restriction code 	D/E
 IMDG Limited quantities (LQ) Excepted quantities (EQ) 	1L 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

	5: Regulatory information
 15.1 Safety, h mixture 	ealth and environmental regulations/legislation specific for the substance or
	ording to Regulation (EC) No 1272/2008
	classified and labelled according to the CLP regulation.
· Hazard pictog	
GHS02 GHS	07
· Signal word Da	anger
· Hazard statem	
	mmable liquid and vapour.
	erious eye irritation.
• Precautionary P210	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241	Use explosion-proof [electrical/ventilating/lighting] equipment.
	353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with
	water [or shower].
P305+P351+P3	338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
D400 - D005	lenses, if present and easy to do. Continue rinsing.
P403+P235 P501	Store in a well-ventilated place. Keep cool. Dispose of contents/container in accordance with local/regional/national/international
F 301	regulations.
D'	
Directive 2012	
	rous substances - ANNEX I None of the ingredients is listed. bry P5c FLAMMABLE LIQUIDS
	Intity (tonnes) for the application of lower-tier requirements 5,000 t
	initity (tonnes) for the application of upper-tier requirements 50,000 t
	(EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
	011/65/EU on the restriction of the use of certain hazardous substances in
	electronic equipment – Annex II
None of the ing	redients is listed.
0	(Contd. on page 9)



according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025

Trade name: 2-IsobutyI-3-Methyl Pyrazine 5% ETOH Natural

· REGULATION (EU) 2019/1148

(Contd. of page 8)

• Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

 Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

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

SECTION 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

H315 Causes skin irritation.

H319 Causes serious eye irritation.

- · Department issuing SDS: Product safety department
- · Contact:

Product Safety Department

productsafety@adv-bio.com

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
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
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)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
VPVB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation - Category 2