

Date of issue: 02/04/2025 Reviewed on 02/04/2025

1 Identification

· Product identifier

· Trade name: 2-Methoxy Pyrazine

· CAS Number: 3149-28-8

· Other means of identification

· Product number: 4065

EC number: 221-579-8

· 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.

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

· Hazard pictograms



GHS02

- · Signal word Warning
- · Hazard statements

H226 Flammable liquid and vapor.

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· 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.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

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

water [or shower].

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 = 0 Fire = 2 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0 Fire = 2

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: Substances

· CAS No. Description

CAS: 3149-28-8 methoxypyrazine

- · Identification number(s)
- **EC number:** 221-579-8

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.
- · After swallowing: If symptoms persist consult doctor.

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· 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.

· Protective Action Criteria for Chemicals

· PAC-1:

Substance is not listed.

PAC-2:

Substance is not listed.

PAC-3:

Substance is not listed.

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.

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.

Protect against electrostatic charges.

- Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Please refer to the product specification and/or Certificate of Analysis for product storage requirements. (Continued on page 4)



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- · 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

- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- 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:

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

- · 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.

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 Molecular Weight: 110.12 g/mol

· Physical state Liquid

Color: According to product specificationOdor: According to product specification

Odor threshold:
Not determined.
Undetermined.

· Boiling point/Boiling range: 61 °C (141.8 °F)

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· Flammability: Flammable.

· Explosion limits:

Lower: Not determined.
Upper: Not determined.
Flash point: 51.2 °C (124.2 °F)
Decomposition temperature: Not determined.
pH-value: Not determined.

· Viscosity:

Kinematic: Not determined.Dynamic: Not determined.

· Solubility in / Miscibility with

· Water: Not miscible or difficult to mix.

Partition coefficient (n-octanol/water): Not determined.Vapor pressure: Not determined.

· Vapor pressure:

Density at 20 °C (68 °F): 1.125-1.135 g/cm³ (9.38813-9.47158 lbs/gal)

· Relative density Not determined.

• Specific Gravity 1.125 – 1.135 @ 20 °C (34 – 34 @ 68 °F)

Refractive Index

Vapor densityParticle characteristicsNot determined.Not applicable.

Other information

Appearance:

· Form: Liquid

Important information on protection of health and environment, and on safety.

· **Ignition temperature:** Not determined.

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

explosive air/vapor mixtures are possible.

· VOC content: 0.00 %

0.0 g/l / 0.00 lb/gal

· 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.

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11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Interactive effects No interactive effects between components are known.
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not 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.
- · 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.

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UN-Number DOT, IMDG, IATA	UN1993
UN proper shipping name DOT IMDG, IATA	Flammable liquids, n.o.s. (methoxypyrazine) FLAMMABLE LIQUID, N.O.S. (methoxypyrazine)
Transport hazard class(es)	
DOT RAMMALE 10115	
Class Label	3 Flammable liquids 3
IMDG, IATA	
Class Label	3 Flammable liquids 3
Packing group DOT, IMDG, IATA	III
Environmental hazards: Marine pollutant:	No
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
Transport/Additional information:	
DOT Quantity limitations	On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L
IMDG Limited quantities (LQ) Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
Special precautions for user Stowage Category	Warning: Flammable liquids A
UN "Model Regulation":	UN 1993 FLAMMABLE LIQUID, N.O. (METHOXYPYRAZINE), 3, III



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15 Regulatory information

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

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

TSCA (Toxic Substances Control Act):

ACTIVE

· Hazardous Air Pollutants

Substance is not listed.

Proposition 65

· Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

Substance is not listed.

· TLV (Threshold Limit Value)

Substance is not listed.

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

Substance is not listed.

· GHS label elements

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

· Hazard pictograms



GHS02

- · Signal word Warning
- · Hazard statements

H226 Flammable liquid and vapor.

· Precautionary statements

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

No smoking.

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

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

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

water [or shower].

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.

- Department issuing SDS: Product Safety Department
- · Contact:

Product Safety Department productsafety@adv-bio.com

- Date of previous version 01/25/2025
- Date of preparation 02/04/2025
- · 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

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, ÉU)

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 3: Flammable liquids - Category 3

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