

ALFAAA12759

## 2-Ethylpyrazine

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

|  |  |
|--|--|
| <b>产品说明:</b><br><b>Product Description:</b>                                      | <b>2-乙基吡嗪</b><br><b>2-Ethylpyrazine</b>  |
| <b>Cat No. :</b><br><b>Synonyms</b><br><b>CAS No</b><br><b>Molecular Formula</b> | <b>A12759</b><br>2-Ethyl-1,4-diazine<br>13925-00-3<br>C6 H8 N2   |
| <b>Supplier</b>  | Avocado Research Chemicals Ltd.<br>(Part of Thermo Fisher Scientific)<br>Shore Road, Heysham<br>Lancashire, LA3 2XY,<br>United Kingdom<br>Office Tel: +44 (0) 1524 850506<br>Office Fax: +44 (0) 1524 850608   |
| <b>Emergency Telephone Number</b>  | For information <b>US</b> call: 001-800-227-6701 / <b>Europe</b> call: +32 14 57 52 11<br>Emergency Number <b>US</b> :001-201-796-7100 / <b>Europe</b> : +32 14 57 52 99<br><b>CHEMTREC</b> Tel. No. <b>US</b> :001-800-424-9300 / <b>Europe</b> :001-703-527-3887 |
| <b>E-mail address</b>  | begel.sdsdesk@thermofisher.com   |
| <b>Recommended Use</b><br><b>Uses advised against</b>                            | Laboratory chemicals.<br>No Information available  |

### SECTION 2. HAZARD IDENTIFICATION

|  |                                   |   |
|--|-----------------------------------|---|
| <b>Physical State</b><br>Liquid                          | <b>Appearance</b><br>Light yellow | <b>Odor</b><br>No information available |
| <b>Emergency Overview</b><br>Flammable liquid and vapor. |                                   |   |

#### Classification of the substance or mixture

|                    |            |
|--------------------|------------|
| Flammable liquids. | Category 3 |
|--------------------|------------|

#### Label Elements



**Signal Word**

**Warning**

**Hazard Statements**

## 2-Ethylpyrazine

H226 - Flammable liquid and vapor

**Precautionary Statements****Prevention**

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P233 - Keep container tightly closed

P240 - Ground and bond container and receiving equipment

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

P242 - Use non-sparking tools

P243 - Take action to prevent static discharges

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

**Response**

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

**Storage**

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

**Disposal**

P501 - Dispose of contents/ container to an approved waste disposal plant

**Physical and Chemical Hazards**

Flammable liquid. Vapors may cause flash fire or explosion.

**Health Hazards**

The product contains no substances which at their given concentration are considered to be hazardous to health.

**Environmental hazards**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Will likely be mobile in the environment due to its water solubility. The product is water soluble, and may spread in water systems.

This product does not contain any known or suspected endocrine disruptors.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Component        | CAS No     | Weight % |
|------------------|------------|----------|
| Pyrazine, ethyl- | 13925-00-3 | <=100    |

**SECTION 4. FIRST AID MEASURES****Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

**Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

**Inhalation**

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

**Ingestion**

Do NOT induce vomiting. Get medical attention.

**Most important symptoms and effects**

Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

**Self-Protection of the First Aider**

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

**Notes to Physician**

Treat symptomatically.

**SECTION 5. FIRE-FIGHTING MEASURES**

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**Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam. Water mist may be used to cool closed containers.

**Extinguishing media which must not be used for safety reasons**

No information available.

**Specific Hazards Arising from the Chemical**

Flammable. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Vapors may form explosive mixtures with air.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**SECTION 6. ACCIDENTAL RELEASE MEASURES****Personal Precautions**

Ensure adequate ventilation. Use personal protective equipment as required. Remove all sources of ignition. Take precautionary measures against static discharges.

**Environmental Precautions**

Prevent further leakage or spillage if safe to do so.

**Methods for Containment and Clean Up**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Refer to protective measures listed in Sections 8 and 13.

**SECTION 7. HANDLING AND STORAGE****Handling**

Ensure adequate ventilation. Wear personal protective equipment/face protection. Avoid contact with skin and eyes. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Use spark-proof tools and explosion-proof equipment. Use only non-sparking tools. Wash hands before breaks and immediately after handling the product. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges.

**Storage**

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks and flame. Flammables area. Keep container tightly closed in a dry and well-ventilated place.

**Specific Use(s)**

Use in laboratories

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control Parameters****Monitoring methods**

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS70 General methods for sampling airborne gases and vapours MDHS 88 Volatile organic compounds in air. Laboratory method using diffusive samplers, solvent desorption and gas chromatography MDHS 96 Volatile organic compounds in air - Laboratory method using pumped solid sorbent tubes, solvent desorption and gas chromatography

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**Exposure Controls****Engineering Measures**

Use explosion-proof electrical/ventilating/lighting equipment. Ensure adequate ventilation, especially in confined areas. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

**Personal protective equipment**

**Eye Protection** Wear safety glasses with side shields (or goggles) (European standard - EN 166)

**Hand Protection** Protective gloves

| Glove material | Breakthrough time                 | Glove thickness | EU standard | Glove comments        |
|----------------|-----------------------------------|-----------------|-------------|-----------------------|
| Nitrile rubber | See manufacturers recommendations | -               | EN 374      | (minimum requirement) |
| Neoprene       |                                   |                 |             |                       |
| Natural rubber |                                   |                 |             |                       |
| PVC            |                                   |                 |             |                       |

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

(Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure

**Respiratory Protection** No protective equipment is needed under normal use conditions.

**Large scale/emergency use** Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

**Small scale/Laboratory use** Maintain adequate ventilation

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

|                                   |   |
|-----------------------------------|---|
| <b>Appearance</b>                 | Light yellow  |
| <b>Physical State</b>             | Liquid  |
| <b>Odor</b>                       | No information available                                  |
| <b>Odor Threshold</b>             | No data available   |
| <b>pH</b>                         | No information available                                  |
| <b>Melting Point/Range</b>        | No data available   |
| <b>Softening Point</b>            | No data available   |
| <b>Boiling Point/Range</b>        | 152 - 153 °C / 305.6 - 307.4 °F @ 760 mmHg                |
| <b>Flash Point</b>                | 43 °C / 109.4 °F <b>Method</b> - No information available |
| <b>Evaporation Rate</b>           | No data available   |
| <b>Flammability (solid,gas)</b>   | Not applicable Liquid                                     |
| <b>Explosion Limits</b>           | No data available   |
| <b>Vapor Pressure</b>             | No data available   |
| <b>Vapor Density</b>              | 3.73 (Air = 1.0)  |
| <b>Specific Gravity / Density</b> | 0.980   |

## 2-Ethylpyrazine

|  |                          |  |
|--|--------------------------|--|
| <b>Bulk Density</b>                            | Not applicable           | Liquid                                 |
| <b>Water Solubility</b>                        | freely soluble           |  |
| <b>Solubility in other solvents</b>            | No information available |  |
| <b>Partition Coefficient (n-octanol/water)</b> |                          |  |
| <b>Autoignition Temperature</b>                | No data available        |  |
| <b>Decomposition Temperature</b>               | No data available        |  |
| <b>Viscosity</b>                               | No data available        |  |
| <b>Explosive Properties</b>                    |                          | explosive air/vapour mixtures possible |
| <b>Oxidizing Properties</b>                    | No information available |  |
| <b>Molecular Formula</b>                       | C6 H8 N2                 |  |
| <b>Molecular Weight</b>                        | 108.14                   |  |

## SECTION 10. STABILITY AND REACTIVITY

|   |  |
|---|--|
| <b>Stability</b>                        | Stable under normal conditions.  |
| <b>Hazardous Reactions</b>              | No information available.  |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur.   |
| <b>Conditions to Avoid</b>              | Keep away from open flames, hot surfaces and sources of ignition. Incompatible products. |
| <b>Materials to avoid</b>               | Strong oxidizing agents. Strong acids.   |
| <b>Hazardous Decomposition Products</b> | Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ).          |

## SECTION 11. TOXICOLOGICAL INFORMATION

|   |   |
|---|---|
| <b>Product Information</b>                    | No acute toxicity information is available for this product |
| <b>(a) acute toxicity;</b>                    |   |
| <b>(b) skin corrosion/irritation;</b>         | No data available   |
| <b>(c) serious eye damage/irritation;</b>     | No data available   |
| <b>(d) respiratory or skin sensitization;</b> |   |
| <b>Respiratory</b>                            | No data available   |
| <b>Skin</b>                                   | No data available   |
| <b>(e) germ cell mutagenicity;</b>            | No data available   |
| <b>(f) carcinogenicity;</b>                   | No data available   |
|   | There are no known carcinogenic chemicals in this product   |
| <b>(g) reproductive toxicity;</b>             | No data available   |
| <b>(h) STOT-single exposure;</b>              | No data available   |
| <b>(i) STOT-repeated exposure;</b>            | No data available   |
| <b>Target Organs</b>                          | No information available.                                   |

**2-Ethylpyrazine**

|   |   |
|---|---|
| <b>(j) aspiration hazard;</b>                     | No data available   |
| <b>Other Adverse Effects</b>                      | The toxicological properties have not been fully investigated.                      |
| <b>Symptoms / effects, both acute and delayed</b> | Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting |

**SECTION 12. ECOLOGICAL INFORMATION**

|   |   |
|---|---|
| <b>Ecotoxicity effects</b>  | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.   |
| <b>Persistence and Degradability</b><br><b>Persistence</b>  | Soluble in water, Persistence is unlikely, based on information available.  |
| <b>Bioaccumulative Potential</b>  | Bioaccumulation is unlikely   |
| <b>Mobility in soil</b>   | The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility Highly mobile in soils   |
| <b>Endocrine Disruptor Information</b><br><b>Persistent Organic Pollutant</b><br><b>Ozone Depletion Potential</b> | This product does not contain any known or suspected endocrine disruptors<br>This product does not contain any known or suspected substance<br>This product does not contain any known or suspected substance |

**SECTION 13. DISPOSAL CONSIDERATIONS**

|  |  |
|--|--|
| <b>Waste from Residues/Unused Products</b> | Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.   |
| <b>Contaminated Packaging</b>              | Dispose of this container to hazardous or special waste collection point. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition. |
| <b>Other Information</b>                   | Waste codes should be assigned by the user based on the application for which the product was used. Do not flush to sewer. Can be landfilled or incinerated, when in compliance with local regulations.                                  |

**SECTION 14. TRANSPORT INFORMATION****Road and Rail Transport**

|                                |                          |
|--------------------------------|--------------------------|
| <b>UN-No</b>                   | UN1993                   |
| <b>Proper Shipping Name</b>    | Flammable liquid, n.o.s. |
| <b>Technical Shipping Name</b> | Ethylpyrazine            |
| <b>Hazard Class</b>            | 3                        |
| <b>Packing Group</b>           | III                      |

**IMDG/IMO**

|                                |                          |
|--------------------------------|--------------------------|
| <b>UN-No</b>                   | UN1993                   |
| <b>Proper Shipping Name</b>    | Flammable liquid, n.o.s. |
| <b>Technical Shipping Name</b> | Ethylpyrazine            |
| <b>Hazard Class</b>            | 3                        |

## 2-Ethylpyrazine

Packing Group III

IATA

UN-No UN1993  
 Proper Shipping Name FLAMMABLE LIQUID, N.O.S.\*  
 Technical Shipping Name Ethylpyrazine  
 Hazard Class 3  
 Packing Group III

Special Precautions for User No special precautions required

## SECTION 15. REGULATORY INFORMATION

## International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

| Component        | The Inventory of Hazardous Chemicals (2015 Edition) | List of dangerous goods GB 12268 - 2012 | TCSI | IECSC | EINECS    | TSCA | DSL | PICCS | ENCS | ISHL | AICS | KECL |
|------------------|---|---|------|-------|-----------|------|-----|-------|------|------|------|------|
| Pyrazine, ethyl- | -   | -                                       | X    | X     | 237-691-5 | X    | -   | X     | -    |      | X    | -    |

## National Regulations

## SECTION 16. OTHER INFORMATION

Prepared By Health, Safety and Environmental Department  
 Creation Date 26-Sep-2009  
 Revision Date 18-Sep-2025  
 Revision Summary Not applicable.

## Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Legend

CAS - Chemical Abstracts Service

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

DNEL - Derived No Effect Level

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC - Predicted No Effect Concentration

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

**2-Ethylpyrazine****NOEC** - No Observed Effect Concentration**PBT** - Persistent, Bioaccumulative, Toxic**POW** - Partition coefficient Octanol:Water**vPvB** - very Persistent, very Bioaccumulative**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road**OECD** - Organisation for Economic Co-operation and Development**BCF** - Bioconcentration factor**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code**MARPOL** - International Convention for the Prevention of Pollution from Ships**ATE** - Acute Toxicity Estimate**VOC** - (Volatile Organic Compound)**Key literature references and sources for data**<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of Safety Data Sheet**