

Safety Data Sheet

according to UN GHS (ST/SG/AC.10/11/Rev.8)

NATURAL PYRAZINES MIXTURE No. 10

Revision date: 15.12.2022

Product code: 314910WW

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

NATURAL PYRAZINES MIXTURE No. 10

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Manufacturing of: - Air care products - Perfumes, fragrances - Pharmaceuticals - Cosmetics, personal care products - Flavouring Substances - Other

1.3. Details of the supplier of the safety data sheet

| | | |
|-------------------------|----------------------------|-------------------------------|
| Company name: | Axxence Aromatic GmbH | |
| Street: | Tackenweide 28 | |
| Place: | D-46446 Emmerich am Rhein | |
| Telephone: | + 49 2822 68561 0 | Telefax: + 49 2822 68561 39 |
| e-mail: | info@axxence.com | |
| Contact person: | Andreas Goertz | Telephone: + 49 2822 68561 37 |
| e-mail: | andreas.goertz@axxence.com | |
| Internet: | www.axxence.de | |
| Responsible Department: | QM - Regulatory Affairs | |

1.4. Emergency telephone number: +49 2822 68561 99

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

UN GHS (ST/SG/AC.10/11/Rev.8)

Hazard categories:
 Flammable liquid: Flam. Liq. 4
 Acute toxicity: Acute Tox. 4
 Hazard Statements:
 Combustible liquid.
 Harmful if swallowed.

2.2. Label elements

UN GHS (ST/SG/AC.10/11/Rev.8)

Hazard components for labelling

NATURAL 2-ETHYL-3,6-DIMETHYLPYRAZINE
 NATURAL 2-ETHYL-6-METHYL PYRAZINE
 NATURAL 2-ETHYL-5-METHYLPYRAZINE
 NATURAL 2-ETHYL-3,5-DIMETHYLPYRAZINE
 NATURAL 2,3,5-TRIMETHYLPYRAZINE
 NATURAL 2,5-DIMETHYLPYRAZINE
 NATURAL 2-ETHYL-3-METHYLPYRAZINE
 NATURAL 3,5-DIETHYL-2-METHYLPYRAZINE
 NATURAL 2,5-DIETHYL-3-METHYLPYRAZINE

Signal word: Warning

Pictograms:



Hazard statements

H227 Combustible liquid.

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H302 Harmful if swallowed.

Precautionary statements

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

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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

P301+P317 IF SWALLOWED: Get medical help.

P330 Rinse mouth.

P403 Store in a well-ventilated place.

P501 Dispose of contents/container to .

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

| CAS No | Chemical name | Quantity |
|------------|--|-------------|
| | Classification (UN GHS (ST/SG/AC.10/11/Rev.8)) | |
| 13360-65-1 | NATURAL 2-ETHYL-3,6-DIMETHYLPYRAZINE | 20 - < 25 % |
| | Acute Tox. 4; H302 | |
| 13925-03-6 | NATURAL 2-ETHYL-6-METHYL PYRAZINE | 20 - < 25 % |
| | Acute Tox. 4; H302 | |
| 13360-64-0 | NATURAL 2-ETHYL-5-METHYLPYRAZINE | 15 - < 20 % |
| | Acute Tox. 4; H302 | |
| 13925-07-0 | NATURAL 2-ETHYL-3,5-DIMETHYLPYRAZINE | 5 - < 10 % |
| | Acute Tox. 4; H302 | |
| 14667-55-1 | NATURAL 2,3,5-TRIMETHYLPYRAZINE | 5 - < 10 % |
| | Acute Tox. 4, Aquatic Acute 3; H302 H402 | |
| 123-32-0 | NATURAL 2,5-DIMETHYLPYRAZINE | 5 - < 10 % |
| | Flam. Liq. 3, Acute Tox. 4; H226 H302 | |
| 15707-23-0 | NATURAL 2-ETHYL-3-METHYLPYRAZINE | 1 - < 5 % |
| | Flam. Liq. 4, Acute Tox. 4; H227 H302 | |
| 18138-05-1 | NATURAL 3,5-DIETHYL-2-METHYLPYRAZINE | 1 - < 5 % |
| | Acute Tox. 4; H302 | |
| 32736-91-7 | NATURAL 2,5-DIETHYL-3-METHYLPYRAZINE | 1 - < 5 % |
| | Acute Tox. 4; H302 | |

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

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After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink 1 glass of water. Medical treatment necessary.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up**For cleaning up**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

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Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Hints on joint storage

No special measures are necessary.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls



Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|----------------|
| Physical state: | Liquid |
| Colour: | |
| Melting point/freezing point: | not determined |
| Boiling point or initial boiling point and boiling range: | ~180 °C |
| Flammability | |
| Solid/liquid: | not applicable |
| Gas: | not applicable |
| Lower explosion limits: | not determined |
| Upper explosion limits: | not determined |
| Flash point: | 64 °C |
| Auto-ignition temperature: | not determined |

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| | |
|--|------------------------|
| Decomposition temperature: | not determined |
| pH-Value: | not determined |
| Water solubility: | No |
| Solubility in other solvents not determined | |
| Partition coefficient n-octanol/water: | not determined |
| Vapour pressure: | not determined |
| Density (at 20 °C): | 0,97 g/cm ³ |
| Relative vapour density: | not determined |

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

not explosive according to EU A.14

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Evaporation rate:

not determined

Solid content:

not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Harmful if swallowed.

ATEmix calculated

ATE (oral) 640,7 mg/kg

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| CAS No | Chemical name | | | | |
|------------|--------------------------------------|--------------------|---------|------------------------------------|----------|
| | Exposure route | Dose | Species | Source | Method |
| 13360-65-1 | NATURAL 2-ETHYL-3,6-DIMETHYLPYRAZINE | | | | |
| | oral | LD50 456 mg/kg | Rat | | |
| 13925-03-6 | NATURAL 2-ETHYL-6-METHYL PYRAZINE | | | | |
| | oral | ATE 500 mg/kg | | | |
| 13360-64-0 | NATURAL 2-ETHYL-5-METHYLPYRAZINE | | | | |
| | oral | LD50 900 mg/kg | Rat | Drug and Chemical Toxicology. 1980 | |
| 13925-07-0 | NATURAL 2-ETHYL-3,5-DIMETHYLPYRAZINE | | | | |
| | oral | LD50 456 mg/kg | Rat | | |
| 14667-55-1 | NATURAL 2,3,5-TRIMETHYLPYRAZINE | | | | |
| | oral | LD50 806 mg/kg | Rat | Drug and Chemical Toxicology. 1980 | |
| 123-32-0 | NATURAL 2,5-DIMETHYLPYRAZINE | | | | |
| | oral | LD50 1020 mg/kg | Rat | TheGoodScentCompany | |
| 15707-23-0 | NATURAL 2-ETHYL-3-METHYLPYRAZINE | | | | |
| | oral | LD50 600 mg/kg | Rat | REACH Registration | OECD 401 |
| 18138-05-1 | NATURAL 3,5-DIETHYL-2-METHYLPYRAZINE | | | | |
| | oral | ATE 500 mg/kg | | | |
| 32736-91-7 | NATURAL 2,5-DIETHYL-3-METHYLPYRAZINE | | | | |
| | oral | ATE 500 mg/kg | | | |

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

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

No information available.

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

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12.1. Toxicity

The product is not: Ecotoxic.

| CAS No | Chemical name | | | | | |
|------------|----------------------------------|---------------|-----------|---------|---------------------------------|--------------------------------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 14667-55-1 | NATURAL 2,3,5-TRIMETHYLPYRAZINE | | | | | |
| | Acute algae toxicity | ErC50 mg/l | 82,63 | 96 h | Green algae | Danish QSAR Database |
| 15707-23-0 | NATURAL 2-ETHYL-3-METHYLPYRAZINE | | | | | |
| | Acute algae toxicity | ErC50 mg/l | >100 | 72 h | Pseudokirchneriella subcapitata | REACH Registration OECD 201 |
| | Acute crustacea toxicity | EC50 mg/l | >100 | 48 h | Daphnia magna (Big water flea) | REACH Registration OECD 202 |

12.2. Persistence and degradability

The product has not been tested.

| CAS No | Chemical name | | | |
|------------|--|-------|----|--------------------|
| | Method | Value | d | Source |
| | Evaluation | | | |
| 15707-23-0 | NATURAL 2-ETHYL-3-METHYLPYRAZINE | | | |
| | OECD 301D | 7% | 28 | REACH Registration |
| | Not readily biodegradable (according to OECD criteria) | | | |

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|------------|--------------------------------------|---------|
| 13360-65-1 | NATURAL 2-ETHYL-3,6-DIMETHYLPYRAZINE | 2,07 |
| 13925-03-6 | NATURAL 2-ETHYL-6-METHYL PYRAZINE | 1,2 |
| 13360-64-0 | NATURAL 2-ETHYL-5-METHYLPYRAZINE | 1,2 |
| 13925-07-0 | NATURAL 2-ETHYL-3,5-DIMETHYLPYRAZINE | 1,457 |
| 14667-55-1 | NATURAL 2,3,5-TRIMETHYLPYRAZINE | 0,95 |
| 123-32-0 | NATURAL 2,5-DIMETHYLPYRAZINE | 0,63 |
| 15707-23-0 | NATURAL 2-ETHYL-3-METHYLPYRAZINE | 1,42 |
| 18138-05-1 | NATURAL 3,5-DIETHYL-2-METHYLPYRAZINE | 1,966 |
| 32736-91-7 | NATURAL 2,5-DIETHYL-3-METHYLPYRAZINE | 1,966 |

12.4. Mobility in soil

The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste

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according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Marine transport (IMDG)

| | |
|---|--|
| <u>14.1. UN number or ID number:</u> | No dangerous good in sense of this transport regulation. |
| <u>14.2. UN proper shipping name:</u> | No dangerous good in sense of this transport regulation. |
| <u>14.3. Transport hazard class(es):</u> | No dangerous good in sense of this transport regulation. |
| <u>14.4. Packing group:</u> | No dangerous good in sense of this transport regulation. |

Air transport (ICAO-TI/IATA-DGR)

| | |
|---|--|
| <u>14.1. UN number or ID number:</u> | No dangerous good in sense of this transport regulation. |
| <u>14.2. UN proper shipping name:</u> | No dangerous good in sense of this transport regulation. |
| <u>14.3. Transport hazard class(es):</u> | No dangerous good in sense of this transport regulation. |
| <u>14.4. Packing group:</u> | No dangerous good in sense of this transport regulation. |

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport 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 Harmonized 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
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 CLP: Classification, labelling and Packaging
 REACH: Registration, Evaluation and Authorization of Chemicals
 GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
 UN: United Nations
 DNEL: Derived No Effect Level
 DMEL: Derived Minimal Effect Level
 PNEC: Predicted No Effect Concentration
 ATE: Acute toxicity estimate
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%

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ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

VOC: Volatile Organic Compounds

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)