

according to 29 CFR 1910.1200(g)

NATURAL PYRAZINES 16

Revision date: 02/29/2024

Product code: 327220US

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1. Identification

Product identifier

NATURAL PYRAZINES 16

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

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

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: | Safety Team | Telephone: + 49 2822 68561 0 |
| E-mail: | safety-documentation@axxence.com | |
| Internet: | www.axxence.de | |
| Responsible Department: | Safety Management | |
| Emergency phone number: | +49 2822 68561 99 | |

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

Flammable liquids: Flam. Liq. 3 Acute toxicity: Acute Tox. 4 (oral)

Label elements

29 CFR Part 1910.1200

Signal word: Pictograms: Warning



Hazard statements

Flammable liquid and vapor Harmful if swallowed

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wash hands thoroughly after handling.

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

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

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Store in a well-ventilated place. Keep cool.



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Dispose of contents/container to Organic waste.

3. Composition/information on ingredients

<u>Mixtures</u>

Relevant ingredients

| CAS No | Components | Quantity |
|------------|-----------------------------------|-----------|
| 123-32-0 | NATURAL 2,5-DIMETHYLPYRAZINE | 55 - 60 % |
| 108-50-9 | NATURAL 2,6-DIMETHYLPYRAZINE | 12 - 22 % |
| 13925-03-6 | NATURAL 2-ETHYL-6-METHYL PYRAZINE | 9 - 15 % |
| 13360-64-0 | NATURAL 2-ETHYL-5-METHYLPYRAZINE | 3 - 9 % |
| 14667-55-1 | NATURAL 2,3,5-TRIMETHYLPYRAZINE | 3 - 9 % |
| 13925-00-3 | NATURAL 2-ETHYLPYRAZINE | 0 - 5 % |
| 5910-89-4 | NATURAL 2,3-DIMETHYLPYRAZINE | 0 - 5 % |

4. First-aid measures

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.

After contact with eyes

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

After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of of water. Medical treatment necessary.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2), Foam, Extinguishing powder.

Unsuitable extinguishing media

Water.

Specific hazards arising from the chemical

Flammable. Vapors may form explosive mixtures with air.

Special protective equipment and precautions for fire-fighters

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

Additional information

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

6. Accidental release measures



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Personal precautions, protective equipment and emergency procedures

General advice

Remove all sources of ignition. Do not breathe gas/fume/vapor/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk.

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.

Reference to other sections

Safe handling: see section 7 Personal protection equipment (PPE): see section 8 Disposal: see section 13

7. Handling and storage

Precautions for safe handling

Advice on safe handling

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

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapors may form explosive mixtures with air.

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.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

8. Exposure controls/personal protection

Control parameters

Exposure controls





Individual protection measures, such as personal protective equipment



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Eye/face protection

Wear eye protection/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.

9. Physical and chemical properties

Information on basic physical and chemical properties

| Dhysical state: | | |
|--|------------------------------------|------------------------|
| Physical state: Color: | Liquid Colourless to pale brown | |
| Melting point/freezing point: | Colouriess to pale brown | not determined |
| Boiling point or initial boiling point and | | 154 °C |
| boiling range: | | 104 0 |
| Flammability: | | not determined |
| Lower explosion limits: | | not determined |
| Upper explosion limits: | | not determined |
| Flash point: | | 54 °C |
| Auto-ignition temperature: | | not determined |
| Decomposition temperature: | | not determined |
| pH-Value: | | not determined |
| • | | not determined |
| Viscosity / kinematic: | | |
| Water solubility: | | No |
| Solubility in other solvents | | |
| not determined Partition coefficient n-octanol/water: | | not determined |
| | | not determined <4 hPa |
| Vapor pressure: (at 20 °C) | | N4 IIFa |
| Density (at 20 °C): | | 0,98 g/cm ³ |
| Relative vapour density: | | not determined |
| Particle characteristics: | | not applicable |
| Other information | | not applicable |
| | | |
| Information with regard to physical haz | zard classes | |
| Explosive properties | | |
| The product is not: Explosive. not exp Oxidizing properties | plosive according to EU A. 14 | |
| The product is not: oxidising. | | |
| | | |
| Other safety characteristics | | |
| Evaporation rate: | | not determined |
| Solvent content: | | 0% |
| Solid content: | | 14,00 % |

10. Stability and reactivity



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Reactivity

Flammable.

Chemical stability

The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions

No known hazardous reactions.

Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapors may form explosive mixtures with air.

Incompatible materials

No information available.

Hazardous decomposition products

No known hazardous decomposition products.

11. Toxicological information

Information on toxicological effects

Acute toxicity

Harmful if swallowed

ATEmix calculated

ATE (oral) 843,8 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

| CAS No | Components | | | | | |
|------------|-----------------------------------|------------------------------|------|---------|---------------------------------------|--------|
| | Exposure route | Dose | | Species | Source | Method |
| 123-32-0 | NATURAL 2,5-DIMETH | YLPYRAZINE | Ξ | | | |
| | oral | LD50 mg/kg | 1020 | Rat | TheGoodScentCompa ny | |
| 108-50-9 | NATURAL 2,6-DIMETH | YLPYRAZINE | Ξ | | | |
| | oral | LD50 mg/kg | 880 | Rat | TheGoodScentsComp any | |
| 13925-03-6 | NATURAL 2-ETHYL-6-METHYL PYRAZINE | | | | | |
| | oral | ATE mg/kg | 500 | | | |
| 13360-64-0 | NATURAL 2-ETHYL-5-METHYLPYRAZINE | | | | | |
| | oral | LD50 mg/kg | 900 | Rat | Drug and Chemical Toxicology. 1980 | |
| 14667-55-1 | NATURAL 2,3,5-TRIMETHYLPYRAZINE | | | | | |
| | oral | LD50 mg/kg | 806 | Rat | Drug and Chemical Toxicology. 1980 | |
| 13925-00-3 | NATURAL 2-ETHYLPYRAZINE | | | | | |
| | oral | ATE mg/kg | 500 | | | |
| 5910-89-4 | NATURAL 2,3-DIMETH | NATURAL 2,3-DIMETHYLPYRAZINE | | | | |
| | oral | LD50 mg/kg | 613 | Rat | TheGoodScentsComp any | |

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.



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Sensitizing effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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.

Specific target organ toxicity (STOT) - single exposure

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

Specific target organ toxicity (STOT) - repeated exposure

| Based on available data, the classification criteria are not met. | | | |
|---|--|--|--|
| Carcinogenicity (OSHA): | No ingredient of this mixture is listed. | | |
| Carcinogenicity (IARC): | No ingredient of this mixture is listed. | | |
| Carcinogenicity (NTP): | No ingredient of this mixture is listed. | | |

Aspiration hazard

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

Information on other hazards

Other information

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

12. Ecological information

Ecotoxicity

The product is not: Ecotoxic.

Persistence and degradability

The product has not been tested.

Bioaccumulative potential

The product has not been tested.

Mobility in soil

The product has not been tested.

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.

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.

13. Disposal considerations

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 according to applicable legislation.

Contaminated packaging

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

14. Transport information

U.S. DOT 49 CFR 172.101

| | UN | number | or ID | number: |
|--|----|--------|-------|---------|
|--|----|--------|-------|---------|

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NATURAL 2,5-DIMETHYLPYRAZINE (123-32-0): Fire hazard, Immediate (acute) health hazard NATURAL 2,6-DIMETHYLPYRAZINE (108-50-9): Fire hazard, Immediate (acute) health hazard



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NATURAL 2-ETHYL-6-METHYL PYRAZINE (13925-03-6): Immediate (acute) health hazard NATURAL 2-ETHYL-5-METHYLPYRAZINE (13360-64-0): Immediate (acute) health hazard NATURAL 2,3,5-TRIMETHYLPYRAZINE (14667-55-1): Immediate (acute) health hazard NATURAL 2-ETHYLPYRAZINE (13925-00-3): Fire hazard, Immediate (acute) health hazard NATURAL 2,3-DIMETHYLPYRAZINE (5910-89-4): Fire hazard, Immediate (acute) health hazard

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

| 16. Other information | | |
|-----------------------|------------|--|
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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 DMFL: 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% 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). EC/EEC: European Community/European Economic Community EU: European Union M-factor: Multiplication factor IATA: International Air Transport Association DGR: Dangerous Goods Regulations ICAO: International Civil Aviation Organization TI: Technical Instructions VOC: volatile organic compound Other data

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.

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