

according to Regulation (EC) No 1907/2006

NATURAL 2,3,5-TRIMETHYLPYRAZINE

Revision date: 14.12.2022

Product code: 324400

Page 1 of 9

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

1.1. Product identifier

NATURAL 2,3,5-TRIMETHYLPYRAZINE

Substance name:	NATURAL 2,3,5-TRIMETHYLPYRAZINE
CAS No:	14667-55-1
EC No:	238-712-0

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

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute Tox. 4; H302

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Signal word: Warning

Pictograms:

H302



Hazard statements

Harmful if swallowed.

Precautionary statements

P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330	Rinse mouth.
P501	Dispose of contents/container to organic waste.

2.3. Other hazards

No information available.



according to Regulation (EC) No 1907/2006

NATURAL 2,3,5-TRIMETHYLPYRAZINE

Revision date: 14.12.2022

Product code: 324400

Page 2 of 9

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula:	C7 H10 N2
Molecular weight:	122,17 g/mol

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No	1272/2008)		
14667-55-1	NATURAL 2,3,5-TRIMETHYLPYRA	ZINE		100 %
	238-712-0	8-712-0		
	Acute Tox. 4; H302			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. L	imits, M-factors and ATE	
14667-55-1	238-712-0	NATURAL 2,3,5-TRIMETHYLPYRAZINE	100 %
	oral: LD50 = 80	6 mg/kg	

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.

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.

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

according to Regulation (EC) No 1907/2006

NATURAL 2,3,5-TRIMETHYLPYRAZINE

Revision date: 14.12.2022

Product code: 324400

Page 3 of 9

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.

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.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls



according to Regulation (EC) No 1907/2006

NATURAL 2,3,5-TRIMETHYLPYRAZINE

Revision date: 14.12.2022

Product code: 324400

Page 4 of 9





Individual protection measures, such as personal protective equipment

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. Suitable gloves type Disposable gloves + NBR (Nitrile rubber) Suitable gloves type Disposable gloves + NBR (Nitrile rubber)

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:		<20 °C
Boiling point or initial boiling point and		171 °C
boiling range:		
Flammability:		not applicable
		not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		65 °C
Auto-ignition temperature:		not determined
Decomposition temperature:		not determined
pH-Value:		not determined
Water solubility:		15 g/l
(at 25 °C)		
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:		0,95
Vapour pressure:		2 hPa
(at 25 °C)		
Density (at 20 °C):		0,98 g/cm ³
Relative vapour density:		4,2
(at 20 °C)		
9.2. Other information		
Information with regard to physical h	azard classes	
Explosive properties		
not explosive according to EU A.14	1	

Oxidizing properties The product is not: oxidising.

Other safety characteristics



according to Regulation (EC) No 1907/2006

NATURAL 2,3,5-TRIMETHYLPYRAZINE

Revision date: 14.12.2022

Product code: 324400

Page 5 of 9

Evaporation rate:	not determined
Solvent content:	0%
Solid content:	0%

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.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
14667-55-1	NATURAL 2,3,5-TRIMET	HYLPYRAZINE			
	oral	LD50 806 mg/kg	Rat	Drug and Chemical Toxicology. 1980	

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.

Sensitising 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.

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

This substance is classified as hazardous according to Regulation (EC) No 1272 (2008).



according to Regulation (EC) No 1907/2006

NATURAL 2,3,5-TRIMETHYLPYRAZINE

Revision date: 14.12.2022

Product code: 324400

Page 6 of 9

SECTION 12: Ecological information

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-TRIMETH	IYLPYRAZINE			
	Acute algae toxicity	ErC50 82,63 mg/l	96 h Green algae	Danish QSAR Database	

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
14667-55-1	NATURAL 2,3,5-TRIMETHYLPYRAZINE	0,95

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

The product has not been tested.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

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 according to applicable legislation.

List of Wastes Code - residues/unused products

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

List of Wastes Code - used product

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

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

according to Regulation (EC) No 1907/2006

NATURAL 2,3,5-TRIMETHYLPYRAZINE

Revision date: 14.12.2022

Product code: 324400

Page 7 of 9

SECTION 14: Transport information

Land transport (ADR/RID)	No demonstration and in source of this two persons we want to substitute
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.
14.4. Packing group:	
Inland waterways transport (ADN)	No demonstration and in a constant of their formation and the multiplication.
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Marine transport (IMDG)	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Segregation group:	chlorites
Air transport (ICAO-TI/IATA-DGR)	
<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	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.
14.4. Packing group:	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.	
No information available.	
14.7. Maritime transport in bulk according	to IMO instruments
	to IMO instruments
14.7. Maritime transport in bulk according not applicable	to IMO instruments
14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information	
14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information	to IMO instruments ulations/legislation specific for the substance or mixture
14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information	
14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information 15.1. Safety, health and environmental regulatory	ulations/legislation specific for the substance or mixture
14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information 15.1. Safety, health and environmental regulatory information EU regulatory information	ulations/legislation specific for the substance or mixture
14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information 15.1. Safety, health and environmental regulatory information EU regulatory information Restrictions on use (REACH, annex XVII)	ulations/legislation specific for the substance or mixture
14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information 15.1. Safety, health and environmental regulatory information EU regulatory information Restrictions on use (REACH, annex XVII) Entry 3	ulations/legislation specific for the substance or mixture
14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information 15.1. Safety, health and environmental regulatory information Restrictions on use (REACH, annex XVII) Entry 3 Directive 2010/75/EU on industrial emissions:	ulations/legislation specific for the substance or mixture : 100 % (980 g/l)
14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information 15.1. Safety, health and environmental regulatory information EU regulatory information Restrictions on use (REACH, annex XVII) Entry 3 Directive 2010/75/EU on industrial emissions: Directive 2004/42/EC on VOC in	ulations/legislation specific for the substance or mixture
14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information 15.1. Safety, health and environmental regulatory information EU regulatory information Restrictions on use (REACH, annex XVII) Entry 3 Directive 2010/75/EU on industrial emissions: Directive 2004/42/EC on VOC in paints and varnishes:	ulations/legislation specific for the substance or mixture 100 % (980 g/l) 100 % (980 g/l)
14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information 15.1. Safety, health and environmental regulatory information EU regulatory information Restrictions on use (REACH, annex XVII) Entry 3 Directive 2010/75/EU on industrial emissions: Directive 2004/42/EC on VOC in	ulations/legislation specific for the substance or mixture : 100 % (980 g/l)
14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information 15.1. Safety, health and environmental regulatory information EU regulatory information Restrictions on use (REACH, annex XVII) Entry 3 Directive 2010/75/EU on industrial emissions: Directive 2004/42/EC on VOC in paints and varnishes: Information according to Directive 2012/18/EU (SEVESO III):	ulations/legislation specific for the substance or mixture 100 % (980 g/l) 100 % (980 g/l)
14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information 15.1. Safety, health and environmental regulatory information EU regulatory information Restrictions on use (REACH, annex XVII) Entry 3 Directive 2010/75/EU on industrial emissions: Directive 2004/42/EC on VOC in paints and varnishes: Information according to Directive 2012/18/EU (SEVESO III): Additional information	ulations/legislation specific for the substance or mixture 100 % (980 g/l) 100 % (980 g/l) Not subject to 2012/18/EU (SEVESO III)
14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information 15.1. Safety, health and environmental regulatory information EU regulatory information Restrictions on use (REACH, annex XVII) Entry 3 Directive 2010/75/EU on industrial emissions: Directive 2004/42/EC on VOC in paints and varnishes: Information according to Directive 2012/18/EU (SEVESO III):	ulations/legislation specific for the substance or mixture 100 % (980 g/l) 100 % (980 g/l) Not subject to 2012/18/EU (SEVESO III)
 14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information 15.1. Safety, health and environmental regulatory information Restrictions on use (REACH, annex XVII) Entry 3 Directive 2010/75/EU on industrial emissions: Directive 2004/42/EC on VOC in paints and varnishes: Information according to Directive 2012/18/EU (SEVESO III): Additional information To follow: 850/2004/EC, 79/117/EEC, National regulatory information 	ulations/legislation specific for the substance or mixture 100 % (980 g/l) 100 % (980 g/l) Not subject to 2012/18/EU (SEVESO III) 689/2008/EC
14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information 15.1. Safety, health and environmental regulatory information EU regulatory information Restrictions on use (REACH, annex XVII) Entry 3 Directive 2010/75/EU on industrial emissions: Directive 2004/42/EC on VOC in paints and varnishes: Information according to Directive 2012/18/EU (SEVESO III): Additional information To follow: 850/2004/EC, 79/117/EEC,	ulations/legislation specific for the substance or mixture 100 % (980 g/l) 100 % (980 g/l) Not subject to 2012/18/EU (SEVESO III) 689/2008/EC Observe restrictions to employment for juveniles according to the 'juvenile
 14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information 15.1. Safety, health and environmental regulatory information Restrictions on use (REACH, annex XVII) Entry 3 Directive 2010/75/EU on industrial emissions: Directive 2004/42/EC on VOC in paints and varnishes: Information according to Directive 2012/18/EU (SEVESO III): Additional information To follow: 850/2004/EC, 79/117/EEC, National regulatory information Employment restrictions: 	ulations/legislation specific for the substance or mixture 100 % (980 g/l) 100 % (980 g/l) Not subject to 2012/18/EU (SEVESO III) 689/2008/EC Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
 14.7. Maritime transport in bulk according not applicable SECTION 15: Regulatory information 15.1. Safety, health and environmental regulatory information Restrictions on use (REACH, annex XVII) Entry 3 Directive 2010/75/EU on industrial emissions: Directive 2004/42/EC on VOC in paints and varnishes: Information according to Directive 2012/18/EU (SEVESO III): Additional information To follow: 850/2004/EC, 79/117/EEC, National regulatory information 	ulations/legislation specific for the substance or mixture 100 % (980 g/l) 100 % (980 g/l) Not subject to 2012/18/EU (SEVESO III) 689/2008/EC Observe restrictions to employment for juveniles according to the 'juvenile



according to Regulation (EC) No 1907/2006

NATURAL 2,3,5-TRIMETHYLPYRAZINE

Revision date: 14.12.2022

Product code: 324400

Page 8 of 9

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,4,5,6,7,8,9,10,11,14,15,16.

Abbreviations and acronyms

Acute Tox: Acute toxicity 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% 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).

Relevant H and EUH statements (number and full text)

Harmful if swallowed.

Further Information

H302

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

according to Regulation (EC) No 1907/2006

NATURAL 2,3,5-TRIMETHYLPYRAZINE

Revision date: 14.12.2022

Product code: 324400

Page 9 of 9

for adhering to existing laws and regulations.