

according to Regulation (EC) No 1907/2006

NATURAL 2-ISOPROPYL-4-METHYLTHIAZOLE 1% IN ETHANOL

Revision date: 06.12.2022

Product code: 355520

Page 1 of 11

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

1.1. Product identifier

NATURAL 2-ISOPROPYL-4-METHYLTHIAZOLE 1% IN ETHANOL

UFI:

M0MR-R0K9-D103-42YU

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

	<u>^</u>		
	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	+49 2822 68561 99	

1.4. Emergency telephone number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flam. Liq. 2; H225 Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

Danger

2.2. Label elements

Regulation (EC) No 1272/2008

Signal word:

Pictograms:



Hazard statements

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.

Precautionary statements

countionary su	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	5
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.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing



Re

1

Safety Data Sheet

according to Regulation (EC) No 1907/2006

NATURAL 2-ISOPROPYL-4-METHYLTHIAZOLE 1% IN ETHANOL

evision date: 06.12.2022	Product code: 355520	Page 2 of 1
	protection.	
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P337+P313	If eye irritation persists: Get medical advice/attention.	
P370+P378	In case of fire: Use Water spray jet to extinguish.	
P403+P235	Store in a well-ventilated place. Keep cool.	
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						
	EC No	EC No Index No REACH No					
	Classification (Regulation (EC) No	Classification (Regulation (EC) No 1272/2008)					
64-17-5	ethanol, ethyl alcohol						
	200-578-6 603-002-00-5 01-2119457610-43		01-2119457610-43				
	Flam. Liq. 2, Eye Irrit. 2; H225 H319)					
15679-13-7	7 NATURAL 2-ISOPROPYL-4-METHYLTHIAZOLE						
	239-758-4						
	Flam. Liq. 3; H226						

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. Limits, M-factors and ATE		
64-17-5	5 200-578-6 ethanol, ethyl alcohol		98,5 - 99,0 %
	inhalation: LC50 = 121 mg/l (vapours); dermal: LD50 = 17100 mg/kg; oral: LD50 = 10470 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

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink 1 glass of of water.

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.



according to Regulation (EC) No 1907/2006

NATURAL 2-ISOPROPYL-4-METHYLTHIAZOLE 1% IN ETHANOL

Revision date: 06.12.2022

Product code: 355520

Page 3 of 11

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet, Carbon dioxide (CO2), Foam, Extinguishing powder.

5.2. Special hazards arising from the substance or mixture

Highly 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

Remove all sources of ignition. 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 uncontrolled discharge of product into the environment. Explosion risk.

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

No special measures are necessary.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can 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.

7.2. 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,



according to Regulation (EC) No 1907/2006

NATURAL 2-ISOPROPYL-4-METHYLTHIAZOLE 1% IN ETHANOL

Revision date: 06.12.2022

Product code: 355520

Page 4 of 11

open flames and other ignition sources. No smoking.

Hints on joint storage

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

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

DNEL/DMEL values

CAS No	Name of agent						
DNEL type		Exposure route	Effect	Value			
64-17-5	ethanol, ethyl alcohol						
Worker DNEL,	long-term	inhalation	systemic	380-950 mg/m³			
Worker DNEL, long-term		dermal	systemic	343 mg/kg bw/day			
Consumer DN	EL, long-term	inhalation	systemic	114 mg/m³			
Consumer DN	EL, long-term	dermal	systemic	206 mg/kg bw/day			
Consumer DNEL, long-term		oral	systemic	87 mg/kg bw/day			
Worker DNEL, acute		inhalation	local	1900 mg/m³			
Consumer DN	Consumer DNEL, acute		local	950 mg/m³			

PNEC values

CAS No	Name of agent				
Environment	al compartment	Value			
64-17-5	ethanol, ethyl alcohol				
Freshwater		0,96 mg/l			
Marine wate	0,79 mg/l				
Freshwater s	sediment	3,6 mg/kg			
Marine sedir	2,9 mg/kg				
Secondary p	380 mg/kg				
Micro-organi	580 mg/l				
Soil	0,63 mg/kg				

8.2. Exposure controls



Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles.

Hand protection

Suitable gloves type: Butyl caoutchouc (butyl rubber) / FKM (fluoro rubber)

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



according to Regulation (EC) No 1907/2006

NATURAL 2-ISOPROPYL-4-METHYLTHIAZOLE 1% IN ETHANOL

Revision date: 06.12.2022

Product code: 355520

Page 5 of 11

supplier of these gloves.

Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Thermal hazards

Flame-retardant protective clothing. Wear anti-static footwear and clothing

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		78 °C
	boiling range:		
	Flammability		
	Solid/liquid:		not applicable
	Gas:		not applicable
	Lower explosion limits:		3,1 vol. %
	Upper explosion limits:		27,7 vol. %
	Flash point:		13 °C
	Auto-ignition temperature:		368 °C
	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:		58 hPa
	(at 20 °C)		
	Vapour pressure:		293 hPa
	(at 50 °C)		
	Density (at 20 °C):		0,79 g/cm ³
	Relative vapour density:		not determined
<u>9.2</u>	. Other information		
	Information with regard to physical haza	ird classes	
	Explosive properties		
	The product is not: Explosive. not expl	osive according to EU A.14	
	Oxidizing properties	-	
	The product is not: oxidising.		
	Other safety characteristics		
	Evaporation rate:		not determined
	Solvent content:		99,00 %
	Solid content:		0%
			•••
C F	CTION 40. Stability and reactivity		

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.



according to Regulation (EC) No 1907/2006

NATURAL 2-ISOPROPYL-4-METHYLTHIAZOLE 1% IN ETHANOL

Revision date: 06.12.2022

Product code: 355520

Page 6 of 11

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

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

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

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

CAS No	Chemical name							
	Exposure route	Dose		Species	Source	Method		
64-17-5	ethanol, ethyl alcohol	thanol, ethyl alcohol						
	oral	LD50 10470 mg/kg		Rat	REACH Dossier	OECD 401		
	dermal	LD50 mg/kg	17100	Rabbit	REACH Dossier			
	inhalation (4 h) vapour	LC50	121 mg/l	Rat	REACH Dossier	OECD 403		

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/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

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.

Further information

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

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.



according to Regulation (EC) No 1907/2006

NATURAL 2-ISOPROPYL-4-METHYLTHIAZOLE 1% IN ETHANOL

Revision date: 06.12.2022

Product code: 355520

Page 7 of 11

CAS No	Chemical name								
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method		
64-17-5	ethanol, ethyl alcohol								
	Acute fish toxicity	LC50 mg/l	14200		Pimephales promelas (fathead minnow)	REACH Dossier	US EPA method E03-05		
	Acute algae toxicity	ErC50	275 mg/l	72 h	Chlorella vulgaris	REACH Dossier	OECD 201		
	Acute crustacea toxicity	EC50 mg/l	5012	48 h	Ceriodaphnia spec	REACH Dossier	ASTM E729-80		
	Fish toxicity	NOEC	250 mg/l	5 d	Danio rerio (zebrafish)	REACH Dossier	OECD 212		
	Crustacea toxicity	NOEC	9,6 mg/l	9 d	Daphnia magna				
	Acute bacteria toxicity	(EC50 mg/l)	>1000	3 h	Activated sludge	REACH Dossier	OECD 209		

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name								
	Method	Value	d	Source					
	Evaluation								
64-17-5	ethanol, ethyl alcohol								
	OECD 301B 95% 28 REACH Dossier								
	Readily biodegradable (according to OEC	D criteria).	-						
	OECD 301B	84%	20	REACH Dossier					
	Readily biodegradable (according to OECD criteria).								
	OECD 301B 74% 5 REACH Dossier								

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol, ethyl alcohol	-0,3
15679-13-7	NATURAL 2-ISOPROPYL-4-METHYLTHIAZOLE	1,225

BCF

CAS No	Chemical name	BCF	Species	Source
64-17-5	ethanol, ethyl alcohol		Cyprinus carpio (Common Carp)	REACH Registration

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. 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.



according to Regulation (EC) No 1907/2006

NATURAL 2-ISOPROPYL-4-METHYLTHIAZOLE 1% IN ETHANOL

Revision date: 06.12.2022

160305

Product code: 355520

Page 8 of 11

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

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.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 1170
14.2. UN proper shipping name:	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3
Classification code:	F1
Special Provisions:	144 601
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E
Other applicable information (land trans) E2	port)
Inland waterways transport (ADN)	
<u>14.1. UN number or ID number:</u>	UN 1170
14.2. UN proper shipping name:	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
14.3. Transport hazard class(es):	3
14.4. Packing group:	I
Hazard label:	3
Classification code:	F1



according to Regulation (EC) No 1907/2006

NATURAL 2-ISOPROPYL-4-METHYLTHIAZOLE 1% IN ETHANOL

NATURAL 2-ISOPROPYL-4-METHYLTHIAZOLE 1% IN ETHANOL			
Revision date: 06.12.2022	Product code: 355520	Page 9 of 11	
Special Provisions:	144 601		
Limited quantity:	1L		
Excepted quantity:	E2		
Other applicable information (inland wat E2	erways transport)		
Marine transport (IMDG)			
14.1. UN number or ID number:	UN 1170		
14.2. UN proper shipping name:	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)		
14.3. Transport hazard class(es):	3		
14.4. Packing group:	II		
Hazard label:	3		
Special Provisions:	144		
Limited quantity:	1 L		
Excepted quantity:	E2		
EmS:	F-E, S-D		
Air transport (ICAO-TI/IATA-DGR)			
14.1. UN number or ID number:			
14.2. UN proper shipping name:	ETHANOL SOLUTION		
14.3. Transport hazard class(es):	3		
<u>14.4. Packing group:</u> Hazard label:	 3		
	3		
Special Provisions:	A3 A58 A180		
Limited quantity Passenger:	1 L		
Passenger LQ: Excepted quantity:	Y341 E2		
IATA-packing instructions - Passenger:	353		
IATA-max. quantity - Passenger:	5 L		
IATA-packing instructions - Cargo:	364		
IATA-max. quantity - Cargo:	60 L		
14.5. Environmental hazards			
ENVIRONMENTALLY HAZARDOUS:	No		
14.6. Special precautions for user Warning: Combustible liquid.			
14.7. Maritime transport in bulk according t	o IMO instruments		
not applicable			
SECTION 15: Regulatory information			
15.1. Safety, health and environmental regu	lations/legislation specific for the substance or mixture		
EU regulatory information			
Restrictions on use (REACH, annex XVII)			
Entry 3, Entry 40			
2010/75/EU (VOC):	99 % (782,1 g/l)		



according to Regulation (EC) No 1907/2006

NATURAL 2-ISOPROPYL-4-METHYLTHIAZOLE 1% IN ETHANOL

Revision date: 06.12.2022	Product code: 355520	Page 10 of 11
Information according to 2012/18/EU (SEVESO III):	P5c FLAMMABLE LIQUIDS	
National regulatory information		
Employment restrictions:	Observe restrictions to employment for juveniles according work protection guideline' (94/33/EC).	to the 'juvenile
Water hazard class (D):	2 - obviously hazardous to water	
15.2. Chemical safety assessment		
Chemical safety assessments for subs	stances in this mixture were not carried out.	

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,4,5,6,7,8,9,10,11,12,13,14,15,16.

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% 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).



according to Regulation (EC) No 1907/2006

NATURAL 2-ISOPROPYL-4-METHYLTHIAZOLE 1% IN ETHANOL

Revision date: 06.12.2022

Product code: 355520

Page 11 of 11

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Eye Irrit. 2; H319	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liqu	id and vapour.
H226	Flammable liquid and	l vapour.
H319	Causes serious eye i	rritation.

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.)