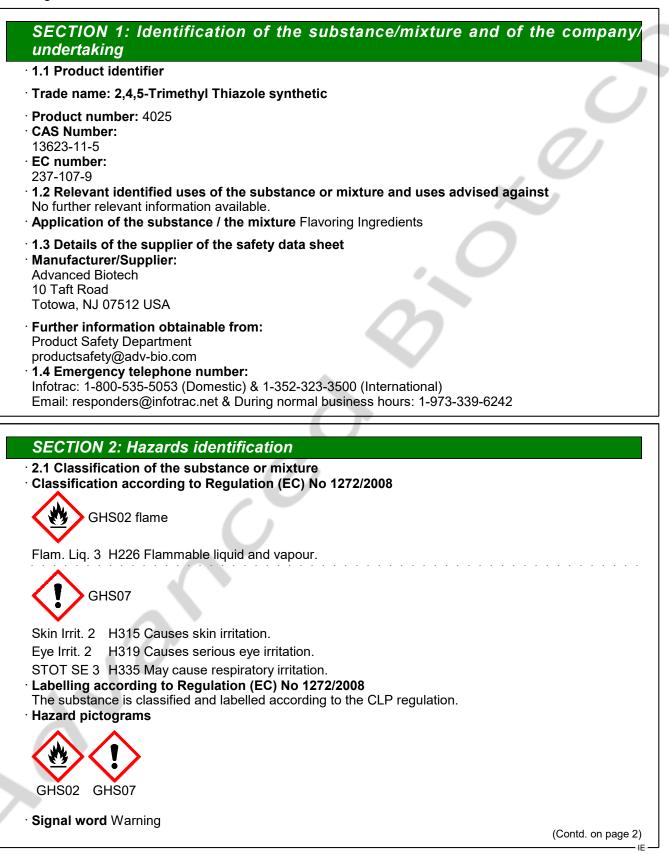


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Safety data sheet

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Trade name: 2,4,5-Trimethyl Thiazole synthetic

Hazard-dete	ermining components of labelling:
2,4,5-Trimet	hyl Thiazole
Hazard stat	ements
H226 Flamn	nable liquid and vapour.
H315 Cause	es skin irritation.
H319 Cause	es serious eye irritation.
H335 May c	ause respiratory irritation.
Precautiona	ary statements
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition source No smoking.
P241	Use explosion-proof [electrical/ventilating/lighting] equipment.
P303+P361	+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin w water [or shower].
P305+P351	+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove conta lenses, if present and easy to do. Continue rinsing.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/internatior regulations.
2.3 Other ha	•
Results of I	PBT and vPvB assessment
	oplicable.

SECTION 3: Composition/information on ingredients

· 3.1 Substances

· CAS No. Description

- CAS: 13623-11-5 2,4,5-Trimethyl Thiazole
- Identification number(s)
- EC number: 237-107-9

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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- For safety reasons unsuitable extinguishing agents: Water with full jet
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- Protective equipment: No special measures required.
- Additional information
- Cool endangered receptacles with water spray.
- Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.
- · 6.2 Environmental precautions: Prevent seepage into sewage system, workpits and cellars.
- 6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to section 13. Ensure adequate ventilation.
- 6.4 Reference to other sections See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
- Information about fire and explosion protection: Keep ignition sources away - Do not smoke. Protect against electrostatic charges.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- **Requirements to be met by storerooms and receptacles:** Please refer to the product specification and/or Certificate of Analysis for product storage requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists valid during the making were used as a basis.
- · 8.2 Exposure controls
- Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

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Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material should be based on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact break through time has to be determined by the manufacturer of the protective gloves and has to be observed.

• Eye/face protection



Tightly sealed goggles

SECTION 9: Physical and chemical properties

Physical state	Liquid	
Colour:	According to product specification	
Odour:	According to product specification Not determined.	
Odour threshold:		
Melting point/freezing point:	Undetermined.	
Boiling point or initial boiling point an	d boiling	
range	166-167 °C	
Flammability	Flammable.	
Lower and upper explosion limit		
Lower:	Not determined.	
Upper:	Not determined.	
Flash point:	56 °C	
Decomposition temperature:	Not determined.	
рН	Not determined.	
Viscosity:		
Kinematic viscosity	Not determined.	
Dynamic:	Not determined.	



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· Solubility	
· water:	Not miscible or difficult to mix.
· Partition coefficient n-octanol/water (log va	Ilue) Not determined.
Vapour pressure:	Not determined.
 Density and/or relative density 	
Density at 20 °C:	1.033 g/cm ³
Relative density	Not determined.
Refractive Index	
· Vapour density	Not determined.
9.2 Other information	
· Appearance:	
· Form:	Liquid
Important information on protection of he	alth
and environment, and on safety.	
· Ignition temperature:	Not determined.
• Explosive properties:	Not determined.
· Solvent content:	
· VOC (EC)	0.00 %
Change in condition	
· Evaporation rate	Not determined.
· Information with regard to physical haz	zard
classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
· Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Flammable liquid and vapour.
Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit	
flammable gases in contact with water	Void
· Oxidising liquids	Void
Oxidising solids	Void
· Organic peroxides	Void
Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

• 10.1 Reactivity No further relevant information available.

- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.

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• **10.5 Incompatible materials:** No further relevant information available.

• **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

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.
- Primary irritant effect:
- Skin corrosion/irritation Causes skin irritation.
- Serious eye damage/irritation Causes serious eye irritation.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- 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 May cause respiratory irritation.
- 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
- Substance is not listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- **vPvB:** Not applicable.
- 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- 12.7 Other adverse effects
- · Additional ecological information:
- · General notes: Not hazardous for water.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- **Recommendation:** Disposal must be made according to official regulations.

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Trade name: 2,4,5-Trimethyl Thiazole synthetic

SECTION 14: Transport information	
14.1 UN number or ID number ADR, IMDG, IATA	UN1993
14.2 UN proper shipping name ADR	1993 FLAMMABLE LIQUID, N.O.S. (2,4,5-Trimethy Thiazole)
IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (2,4,5-Trimethy Thiazole)
14.3 Transport hazard class(es)	
ADR, IMDG, IATA	
· Class · Label	3 Flammable liquids. 3
14.4 Packing group ADR, IMDG, IATA	Ш
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user Stowage Category	Warning: Flammable liquids. A
14.7 Maritime transport in bulk according to IMO instruments	o Not applicable.
Transport/Additional information:	
ADR Limited quantities (LQ) Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
IMDG Limited quantities (LQ) Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 1993 FLAMMABLE LIQUID, N.O.S. (2,4,5- TRIMETHYL THIAZOLE), 3, III

SECTION 15: Regulatory information

[•] 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

· Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

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Trade name: 2,4,5-Trimethyl Thiazole synthetic (Contd. of page 7) · Hazard pictograms GHS02 GHS07 Signal word Warning · Hazard-determining components of labelling: 2,4,5-Trimethyl Thiazole Hazard statements H226 Flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. Precautionary statements P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof [electrical/ventilating/lighting] equipment. P241 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. Store locked up. P405 P501 Dispose of contents/container in accordance with local/regional/national/international regulations. · Directive 2012/18/EU · Named dangerous substances - ANNEX I Substance is not listed. Seveso category P5c FLAMMABLE LIQUIDS Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t Qualifying quantity (tonnes) for the application of upper-tier requirements 50.000 t · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3 DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II Substance is not listed. · REGULATION (EU) 2019/1148 Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3)) Substance is not listed. Annex II - REPORTABLE EXPLOSIVES PRECURSORS Substance is not listed. Regulation (EC) No 273/2004 on drug precursors Substance is not listed. · Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors Substance is not listed. (Contd. on page 9)



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(Contd. of page 8) • **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Product safety department

· Contact:

Product Safety Department

- productsafety@adv-bio.com
- Abbreviations and acronyms:
- ADR: Accord relatif au transport international 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 Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Liq. 3: Flammable liquids Category 3
- Skin Irrit. 2: Skin corrosion/irritation Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) Category 3