SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Version no. : 2.1
Prepared on : 17.11.2025
Revised on : -

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

1.1 Product identifiers

Product name	0.5 M 5-Ethylthiotetrazole Solution (ETT in Anhydrous Acetonitrile)
Product Number	PSR48539, PSR49947, PSR50145
Brand	PureSynth research chemicals
CAS No.	NA

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

Identified uses : Laboratory chemicals

1.3 Details of the supplier of the safety data sheet

Company **PureSynth Research Chemicals GmbH.**

64683 Einhausen Marie-Curie-StraBe. 3, Germany

1.4 Emergency telephone number

Worldwide Helpline No.: 1800-8908-260

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Flam. Liq. 2	H225
Acute Tox. 4 (Oral)	H302
Acute Tox. 4 (Dermal)	H312
Acute Tox. 4 (Inhalation:vapour)	H332
Eye Irrit. 2	H319

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word Danger

Hazard statement(s)

H225	Highly flammable liquid and vapour.
H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.
H319	Causes serious eye irritation.

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves, protective clothing, eye protection, face protection.

P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER, doctor if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	none

2.3 Other hazards: This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher

SECTION 3: Composition / information on ingredients

3.1 Substances

Common names & Synonyms	Mol. formula	CAS number
-	-	-

Component	Classification	Concentration
Acetonitrile (Anhydrous)	Flam. Liq. 2, H225Acute Tox. 4 (Inhalation), H332Acute Tox. 4 (Dermal), H312Acute Tox. 4 (Oral), H302Eye Irrit. 2, H319	85 – 98%
5-Ethylthio-1H-Tetrazole	Skin Irrit. 2, H315Eye Irrit. 2, H319STOT SE 3, H335	2 – 15%

SECTION 4: First aid measures

Description of first aid measures

General advice	Consult a doctor. Show this safety data sheet to the doctor in attendance.
If inhaled	Move person to fresh air and ensure comfortable breathing. If breathing stops: immediately apply artificial respiration, if necessary also oxygen. Call a POISON CENTER/doctor if you feel unwell.
In case of skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Ask for medical advice.
In case of eye contact	Rinse cautiously with water for several minutes. Call a physician immediately. Remove contact lenses, if possible. Continue rinsing.
If swallowed	Drink water immediately (max. 2 cups). Ask for medical advice.
Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Indication of any immediate medical attention and special treatment needed	No data available

SECTION 5: Fire fighting measures

Extinguishing media **Suitable extinguishing media**	Foam. Dry powder. Carbon dioxide.
	Combustible
Special hazards arising from the substance or mixture	Vapors are heavier than air and may spread along floors. Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive mixtures with air at ambient temperatures.
	Carbon oxides. Nitrous gases (NOx). Sulphur oxides. Be careful, the product may re-ignite.
Advice for fire-fighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Use water spray to cool unopened containers. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Further information	No data available

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	Avoid breathing vapours, mist, gas, spray. Avoid substance contact. Ensure adequate ventilation, observe emergency procedures, consult an expert. Keep away from heat and sources of ignition. For personal protection see section 8.
Environmental precautions	Do not allow to enter drains or water courses. Be careful of explosion risk.
Methods and materials for containment and cleaning up	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (seesections 7 and 10). Take up carefully with liquid-absorbent material. Dispose of properly. Clean up affected area.
Reference to other sections	For disposal see section 13.

SECTION 7: Handling and storage

Precautions for safe handling	Use under laboratory hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.
Hygiene measures	Remove contaminated clothes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed in a dry, well-ventilated place. Keep away from heat and sources of ignition. Keep contents under inert gas.
Specific end use(s)	Storage class (TRGS 510): See section 15.1.2. Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls / Personal protection

Control parameters	Ingredients with workplace control parameters
Exposure controls	
Personal protective equipment:	
Eye / face protection	Wear eye protection. Wear closed safety glasses.
Skin protection	Wear protective gloves. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body Protection	Wear protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Flame retardant antistatic protective clothing
Respiratory protection	Required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type ABEK. Wear respiratory protection
Control of environmental exposure	Do not let product enter drains. Risk of explosion.

SECTION 9: Physical and chemical properties

Appearance	Form: Liquid Colour: No data available
Odour	No data available
pH - Value	No data available
Density	0.786 g/cm3
Boiling Point	82 °C
Melting Point	-45 °C
Solubility in water	Completely soluble
Flash point	2 °C
Vapour pressure	93.6 hPa
Auto -ignition temperature	No data available
Vapour density	No data available
Flammability (solid, gas)	No data available
Evaporation rate	No data available
Partition coefficient: n- octanol / water	No data available
Viscosity	No data available
Explosive properties	No data available
Upper / lower flammability or explosive limits	No data available
Oxidizing properties	No data available

Other safety information: No data available

SECTION 10: Stability and reactivity

Reactivity	Vapors can form an explosive mixture with air.
Chemical stability	The product is chemically stable under standard ambient conditions (room temperature).
Possibility of hazardous reactions	No data available
Condition to avoid	Direct sunlight. Extremely high or low temperatures. Open flame.
Incompatible materials	Bases, oxidizing agents, Alkali metals, Reducing agents, Acids.
Hazardous decomposition products	In the event of fire: see section 5.

SECTION 11: Toxicological information

Acute toxicity	Harmful in contact with skin. Harmful if swallowed. Harmful if inhaled.
Skin corrosion/irritation	Mixture causes skin irritation.
Serious eye damage/eye irritation	Acetonitrile: Eyes - Rabbit Result: Causes serious eye irritation.
Respiratory or skin sensitization	Eyes - Bovine cornea Result: Causes serious eye damage.
Germ cell mutagenicity	Test Type: Mutagenicity (mammal cell test): chromosome aberration. Test system: Chinese hamster ovary cells Result: Positive results were obtained in some in vitro tests. Test system: Saccharomyces cerevisiae Result: positive Remarks: Cytogenetic analysis
Carcinogenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	Inhalation: May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional Information	
Endocrine disrupting properties	
Assessment	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher

SECTION 12: Ecological information

Toxicity	No data available
Persistence and degradability	70 % - Result: Readily biodegradable.
Bio accumulative potential	No bioaccumulation is to be expected (log Pow <= 4).
Mobility in soil	Not expected to adsorb on soil.
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at Levels of 0.1% or higher.
Endocrine disrupting properties	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f)

	or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other adverse effects	Avoid release to the environment.

SECTION 13: Disposal considerations

Waste treatment methods Products	Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleansed containers like the product itself.
Contaminated packaging	Dispose of as unused product.

SECTION 14: Transport information

	UN no.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
ADR / RID	1993	FLAMMABLE LIQUID, N.O.S. (Solution of 5-Ethylmercaptotetrazole in Acetonitrile)	3	II	No
IMDG	1993	FLAMMABLE LIQUID, N.O.S. (Solution of 5-Ethylmercaptotetrazole in Acetonitrile)	3	II	No
IATA	1993	Flammable liquid, n.o.s. (Solution of 5-Ethylmercaptotetrazole in Acetonitrile)	3	II	No

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

The information in this SDS is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The user must be determined suitability of this information for his application.