

SAFETY DATA SHEET

5-(Ethylthio)-1H-tetrazole

Version: 1.0

Revision Date: 15.06.2026

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

1.1 Product identifiers

Product name: 5-(Ethylthio)-1H-tetrazole

CAS-No.: 89797-68-2

EC-No.: 618-305-8

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

Identified uses: Laboratory chemicals, Manufacture of substances

Uses advised against: No data available

1.3 Details of the supplier of the safety data sheet

Company Name: MR TEK Ltd

Address: Room 06,13A/F., South Tower, World Finance Center, Harbour City, 17 Canton Road, Tsim Sha Tsui, Kowloon, Hong Kong

Telephone: 0086-021-57684765

1.4 Emergency telephone

Emergency Phone: CHEMTREC (USA): 800-424-9300; CHEMTREC (International): +1-703-527-3887

Service hours: 24 Hours a day, 7 Days a week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin corrosion (Sub-category 1B)

Serious eye damage (Category 1)

Specific target organ toxicity – single exposure (Category 3, Respiratory system)

Hazard Statements:

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H335: May cause respiratory irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Pictogram: Corrosion, Health hazard

Signal Word: **Danger**

Hazard Statements

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

EUH044 Risk of explosion if heated under confinement.

Precautionary Statements

P260 Do not breathe dust.

P271 Use only outdoors or in a well-ventilated area.

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 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Reduced Labeling (≤ 125 ml)

Pictogram: Corrosion

Signal Word: Danger

Hazard Statement: H314 Causes severe skin burns and eye damage.

Precautionary Statements: P260, P280, P303+P361+P353, P304+P340+P310,

P305+P351+P338

Supplemental Hazard information (EU): EUH044 Risk of explosion if heated under confinement.

2.3 Other hazards

This substance contains no components classified as persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

No components with endocrine disrupting properties per REACH Article 57(f), Commission Delegated Regulation (EU) 2017/2100 and Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Chemical Formula: $C_3H_6 N_4S$

Molecular weight: 130.17 g/mol

CAS-No.: 89797-68-2

EC-No.: 618-305-8

Component	Classification	Concentration
5-ethylthio-1H-tetrazole CAS: 89797-68-2	Skin Corr. 1B; Eye Dam. 1; STOT SE 3 H314, H318, H335	Content $\leq$ 100 % Content $\geq$ 99%

Full text of H-statements see Section 16.

SECTION 4: First aid measures**4.1 Description of first-aid measures****General advice**

First aiders shall take self-protection measures. Present this SDS to the attending physician.

If inhaled

Remove victim to fresh air. Seek medical assistance immediately.

In case of skin contact

Take off all contaminated clothing immediately. Rinse skin thoroughly with running water or shower. Call a physician right away.

In case of eye contact

Rinse eyes with plenty of running water for several minutes. Remove contact lenses if easy to do so. Seek treatment from an ophthalmologist immediately.

If swallowed

Let the victim drink up to two glasses of water. Do NOT induce vomiting (risk of tissue perforation). Do not attempt neutralization. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Refer to Section 2.2 and Section 11 for related symptoms and effects.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable media: Water, Foam, Carbon dioxide (CO₂), Dry powder

Unsuitable media: No restrictions specified.

5.2 Special hazards arising from the substance or mixture

Combustible material. Risk of explosive decomposition when heated. Avoid impact and friction.

Hazardous combustion products: Carbon oxides, Nitrogen oxides (NO_x), Sulfur oxides.

5.3 Advice for firefighters

Firefighters must wear self-contained breathing apparatus and full protective clothing. Maintain a safe distance to avoid skin contact.

5.4 Further information

Use water spray to suppress vapours, dust and mists. Prevent fire-fighting water from entering surface water or groundwater.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid inhaling dust and direct contact with the product. Ensure sufficient ventilation. Evacuate the hazard zone and follow emergency protocols. Refer to Section 8 for personal protection requirements.

6.2 Environmental precautions

Do not allow the substance to enter sewers, surface water or groundwater.

6.3 Methods and materials for containment and cleaning up

Cover drains first. Collect and contain spilled material in dry condition. Dispose of waste in accordance with local regulations. Clean the contaminated area thoroughly and avoid dust generation.

6.4 Reference to other sections

Waste disposal: See Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Follow all precautionary instructions listed in Section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in original tightly sealed containers. Keep away from heat, ignition sources and direct sunlight.

Recommended storage temperature: 2 – 8 °C

Storage class (TRGS 510): 4.1A Other explosive hazardous materials

Comply with local national storage regulations.

7.3 Specific end use(s)

No other specific uses beyond those stated in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

No occupational exposure limit (OEL) data available for this substance.

8.2 Exposure controls

Eye / face protection

Wear tightly fitted safety goggles complying with EN 166 (EU) or equivalent standards.

Skin protection

Protective gloves

Material: Nitrile rubber

Minimum thickness: 0.11 mm

Break through time: 480 min

Body protection

Wear appropriate chemical protective clothing.

Respiratory protection

Wear P2 filter respirator when dust is generated. Respiratory equipment shall be maintained, inspected and tested per manufacturer's instructions.

Environmental exposure controls

Prevent discharge into drains and natural water bodies.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Physical state: Solid

- b) Color: No data available
- c) Odor: No data available
- d) Melting point / freezing point: 72 – 80 °C (literature)
- e) Initial boiling point and boiling range: No data available
- f) Flammability (solid): Non-flammable solid
- g) Upper/lower flammability or explosive limits: No data available
- h) Flash point: Not applicable
- i) Autoignition temperature: No data available
- j) Decomposition temperature: Type C
- k) pH: No data available
- l) Viscosity: No data available
- m) Water solubility: No data available
- n) Partition coefficient n-octanol/water: No data available
- o) Vapor pressure: No data available
- p) Density / Relative density: No data available
- q) Relative vapor density: No data available
- r) Particle characteristics: No data available
- s) Explosive properties: Risk of explosion if heated under confinement
- t) Oxidizing properties: None

9.2 Other safety information

No additional data.

SECTION 10: Stability and reactivity

10.1 Reactivity

Risk of explosion when heated under confinement. Finely dispersed product may cause dust explosion when agitated.

10.2 Chemical stability

Stable under normal ambient temperature and handling conditions.

10.3 Possibility of hazardous reactions

Violent reactions may occur with strong oxidizing agents.

10.4 Conditions to avoid

Avoid heating, impact and friction.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

See Section 5 (Firefighting measures).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity: Oral, inhalation, dermal: No data available

Skin corrosion / irritation: Corrosive (OECD Test Guideline 431)

Serious eye damage / irritation: Causes serious eye damage (OECD Test Guideline 437)

Respiratory or skin sensitization: No data available

Germ cell mutagenicity, Carcinogenicity, 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

Endocrine disrupting properties

No endocrine disrupting components at 0.1% or higher concentration per relevant EU regulations.

Note: Physical, chemical and toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1 Toxicity

No ecotoxicity data available.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 PBT and vPvB assessment

Not classified as PBT or vPvB substance (content < 0.1%).

12.6 Endocrine disrupting properties

No endocrine disrupting components at 0.1% or higher concentration.

12.7 Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of waste and contaminated packaging in compliance with local, national and international regulations. No specific waste treatment method specified.

SECTION 14: Transport information

14.1 UN number

ADR/RID: 2925

IMDG: 2925

IATA: 2925

14.2 UN proper shipping name

FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S. (5-ethylthio-1H-tetrazole)

14.3 Transport hazard class(es)

ADR/RID: 4.1 (8)

IMDG: 4.1 (8)

IATA: 4.1 (8)

14.4 Packaging group

ADR/RID, IMDG, IATA: II

14.5 Environmental hazards

ADR/RID: No

IMDG Marine pollutant: No

IATA: No

14.6 Special precautions for user

Tunnel restriction code: (E)

This substance is categorized as self-reactive substance under ADR, IMDG and IATA regulations. Additional packaging restrictions apply in accordance with UN Test Series 6.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations

This SDS complies with Regulation (EC) No. 1907/2006 (REACH).
Comply with Directive 94/33/EC regarding protection of young workers.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been performed for this substance.

SECTION 16: Other information

Full text of Hazard Statements

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

EUH044 Risk of explosion if heated under confinement.

Abbreviation list

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

CLP: Classification, Labelling and Packaging

EC: European Community

GHS: Globally Harmonized System

IATA: International Air Transport Association

IMDG: International Maritime Dangerous Goods Code

OEL: Occupational Exposure Limit

PBT: Persistent, Bioaccumulative and Toxic

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS: Safety Data Sheet

UN: United Nations

vPvB: Very Persistent and Very Bioaccumulative

n.o.s.: Not Otherwise Specified

Disclaimer

The information stated in this Safety Data Sheet is based on current knowledge and experience, and is provided for safety reference only. MR TEK Ltd shall not be held liable for any loss or damage arising from improper handling, use or storage of the product. Users shall assess the suitability and take corresponding safety measures independently.