

Safety Data Sheet: **Standard T2 Tetraol Toxin in Acetonitrile**

1. Identification of the substance/mixture and of the Company

1.1. Product identifiers

Product name	Standard T2 Tetraol Toxin in Acetonitrile		
Product code	SSTET		
Toxin	T2 Tetraol Toxin	CAS	34114-99-3
Solvent	Acetonitrile	CAS	75-05-8
Concentration	100 ppm	Date of version	19 May, 2020

1.2. Intended uses of the substance or mixture and uses advised against

1.2.1. Intended use: <ul style="list-style-type: none"> Laboratory reagent. Research and development. Reference material. 	1.2.2. Uses advised against: <ul style="list-style-type: none"> Not for drug Not to be used in humans or animals. Not food additive
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1.3. Details of the supplier of the safety data sheet

FERMENTEK Ltd
4 Yatziv street, POB 47120
Jerusalem 97800,
Israel

Tel: +972 2 5853953
Fax: +972 2 5853943
eMail: fermentek@fermentek.com
Website: www.fermentek.com

1.4. Emergency Telephone number

For chemical emergency spill, leak, fire, exposure, or accident calls CHEMTREC day or night:
Within USA and Canada: 1-800-424-9300. Outside USA and Canada: +1 703-527-3887

This company is the manufacturer of the product, and the supplier of the safety data sheet

1.5. Reach:

See section 15

2. Hazards identification

Comments:

This product is a vial containing 1 or 5 cc of solution of a negligible amount of toxin (100 ppm), **T2 Tetraol Toxin** dissolved in **Acetonitrile**.

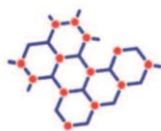
2.1. Classification of the substance or mixture

2.1.1. GHS Classification According to EU Reg. 1272/2008 and US OSHA 1910.1200)

Flammable liquids	Category 2	H225	Highly flammable liquid and vapour
Acute toxicity, Oral	Category 4	H302	Harmful if swallowed.
Acute toxicity, Dermal	Category 4	H312	Harmful if in contact with skin.
Acute toxicity, Inhalation	Category 4	H332	Harmful if inhaled.
Eye irritation	Category 2	H319	Causes serious eye irritation

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2.2.GHS Label elements, including precautionary statements



2.2.1.Pictogram:

Signal word: {DANGER}

2.2.2.GHS Hazard Statements

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

2.2.3.GHS Precautionary Statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Do not smoke.
P280	Wear {protective gloves/protective clothing/eye protection/face protection}.
P262	Do not get in eyes, on skin, or on clothing
P264	Wash {hands} thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

2.2.4.GHS Response Phrases

P308+313	IF EXPOSED OR CONCERNED: Get medical advice/attention
P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P302 + P352 + P312	IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/doctor if you feel unwell.
P301 + P310 + P330	IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

3. Composition/information on ingredients

Substance		T2 Tetraol Toxin	T2 Tetraol Toxin2	T2 Tetraol Toxin	T2 Tetraol Toxin2
Substance name:	Acetonitrile				
Concentration	<100%	100 ppm	100 ppm	100 ppm	100 ppm
	CAS: 75-05-8	1162-65-8	7220-81-7	1165-39-5	7241-98-7
	Molecular Formula: C ₂ H ₃ N Molecular Weight: 41.05	Negligible, no report needed.			
Classification	Flam. Liq. 2; Acute Tox. 4; Eye Irrit. 2; H225, H302, H332, H312, H319				
Mixture? Yes					

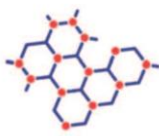
4. First Aid Measures

4.1.Description of First Aid Measures

General advice:	Consult a physician. Show this safety data sheet to the doctor in attendance.
Inhalation:	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin Contact:	Wash off with soap and plenty of water. Consult a physician.

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Eye contact:	Flush eyes with water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Ingestion:	Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Transfer to hospital as soon as possible. Consult a physician.

4.2. Most important symptoms and effects, both acute and delayed

	The onset of symptoms is generally delayed pending conversion to cyanide., Nausea, Vomiting, Diarrhoea, Headache, Dizziness, Rash, Cyanosis, excitement, depression, Drowsiness, impaired judgment, Lack of coordination, stupor, death
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4.3. Indication of any immediate medical attention and special treatment needed

	Treat as cyanide poisoning., Always have on hand a cyanide first-aid kit, together with proper instructions., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
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5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	None known

5.2. Other information

Hazardous combustion products	Carbon oxides, Nitrogen oxides (NOx)
Advice for firefighters	Wear self-contained breathing apparatus for fire fighting if necessary. Wear protective suit if necessary.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Use personal protective equipment as required. Keep people away from and upwind of spill/leak.
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6.2. Environmental precautions

Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.
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6.3. Methods and material for containment and cleaning up

Methods for containment:	Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.
Methods for cleaning up:	Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Cover liquid spill with sand, earth or other non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, and vermiculite). Cover powder spill with plastic sheet or tarp to minimize spreading. Sweep up and shovel into suitable containers for disposal.

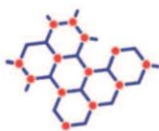
7. Handling and storage

7.1. Precautions for safe handling

Advice on safe handling:	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.
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7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions:	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Reportedly, Light sensitive. Store at -20 °C.
Suitable packaging	Must only be kept in original packaging.
Incompatible materials:	None known based on information available.

8. Exposure Controls/Personal Protection

8.1. Control parameters

Control parameters	Components with workplace control parameters
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8.2. Exposure controls

Appropriate engineering controls	Showers, Eyewash stations, Ventilation systems Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Use fumehood for routine work.
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8.3. Personal protective equipment

<i>[PPE=Personal Protection Equipment]</i>	The employer/end user, prior to use of this product should perform all recommendations below are advisory in nature and a risk assessment. The type of protective equipment must be selected based on the amount and concentration of the dangerous material being used in the workplace.
PPE: Respiratory protection	Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
PPE: Hand Protection:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal techniques to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices, and wash and dry hands
PPE: Eye Protection:	Use a face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)
PPE: Skin and Body Protection:	Handle with gloves. Gloves must be inspected prior to use. 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. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

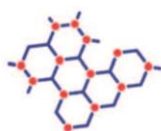
9. Physical and chemical properties

9.1. Physical / chemical properties

Physical State at room temperature	Clear liquid
Color	Colorless
Odor	Ether-like
Melting/freezing point	-48°C
No further safety relevant data are available	

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10. Stability and reactivity

Reactivity:	No information available.
Chemical stability:	Stable under normal conditions.
Conditions to avoid	Heat, flames and sparks. Sunlight.
Incompatible materials	Strong reducers and oxidizers
Possibility of Hazardous Reactions	None under normal processing
Hazardous decomposition products	Carbon oxides

11. Toxicological information

11.1. Information on toxicological effects

11.1.1. Acute Toxicity	
Acute toxicity. Oral	LD50 Oral - Rat - 2.460 mg/kg
Inhalation: (Regulation (EC) No 1272/2008, Annex VI)	LC50 Inhalation - Rat - 4 h - 27,3 mg/l
Acute toxicity - Skin corrosion/irritation:	LD50 Dermal - Rabbit - > 2.000 mg/kg
Serious eye damage/eye irritation:	Positive
Respiratory or skin sensitization/corrosion:	Negative.
11.1.2. Germ cell mutagenicity:	Negative.
11.1.3. Carcinogenicity:	No evidence of carcinogenicity in animal studies.
11.1.4. Reproductive toxicity/Teratogenicity:	No evidence of carcinogenicity in animal studies.
STOT-SE – single exposure (GHS):	Negative
STOT-SE – repeated exposure (GHS):	Negative
Aspiration hazard:	No data available

11.2. Additional information

RTECS number	AL7700000 (Acetonitrile)
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12. Ecological Information

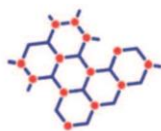
Eco-Toxicity	No further relevant information available
Other adverse effects	No further relevant information available.

13. Disposal Considerations

13.1. Waste treatment methods

Waste from residues / unused products	Dispose of in accordance with local regulations
Contaminated packaging	Dispose of as unused product

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14. Transport information

14.1. UN number, Proper Shipping Name, Transport Hazard Class, packing group

	US DOT	US IATA	US IMDG	US ADR/RID
UN Number UN proper shipping name	1648 Acetonitrile Class 3 Flammable liquid	1648 Acetonitrile Class 3 Flammable liquid	1648 Acetonitrile Class 3 Flammable liquid	1648 Acetonitrile Class 3 Flammable liquid
Transport Hazard Class & Packing Group	Class 3; pg II	Class 3; pg II	Class 3; pg II	Class 3; pg II

14.2. Additional information

Excepted quantities (EQ)	Not applicable
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15. Regulatory information

15.1. Safety, health and environmental regulations/legislation

USA EPA / TSCA	This product is not listed on the USA EPA TSCA (it is for research)
EU ECHA Status	This product is registered with the EU ECHA, Number 200-835-2 (Acetonitrile) ANNEX III: Not Listed REACH: Registered (Acetonitrile)
CA: DSL/NDSL Status	This product is not listed on the Canadian DSL/NDSL

16. Other information

16.1. Date of revision: Tuesday, 19 May, 2020

16.2. Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given here is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of SDS

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