

Safety Data Sheet: **Standard Solution T2 Triol Toxin in Acetonitrile**

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

### 1.1. Product identifiers

|               |   |                 |                     |
|---------------|---|-----------------|---------------------|
| Product name  | <b>Standard Solution T2 Triol Toxin in Acetonitrile</b> |                 |                     |
| Product code  | <b>SSTRI</b>  |                 |                     |
| Toxin         | <b>T2 Triol Toxin</b>                                   | CAS             | <b>34114-98-2</b>   |
| Solvent       | <b>Acetonitrile</b>                                     | CAS             | <b>75-05-8</b>      |
| Concentration | <b>100 ppm</b>  | Date of version | <b>19 May, 2020</b> |

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

|   |   |
|---|---|
| <b>1.2.1. Intended use:</b>   | <b>1.2.2. Uses advised against:</b>   |
| <ul style="list-style-type: none"> <li>Laboratory reagent.</li> <li>Research and development.</li> <li>Reference material.</li> </ul> | <ul style="list-style-type: none"> <li>Not for drug</li> <li>Not to be used in humans or animals.</li> <li>Not food additive</li> </ul> |

### 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 Triol 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

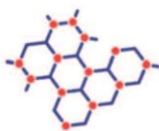
| Substance           |   | T2 Triol                             | T2 Triol                 | T2 Triol         | T2 Triol                 |
|---------------------|---|--------------------------------------|--------------------------|------------------|--------------------------|
|                   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

## 4. First Aid Measures

### 4.1.Description of First Aid Measures

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

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|                     |   |
|---------------------|---|
| <b>Eye contact:</b> | 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.  |
| <b>Ingestion:</b>   | 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 |
|--|---|

#### 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. |
|--|---|

### 5. Fire-fighting measures

#### 5.1. Extinguishing media

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

#### 5.2. Other information

|                                      |  |
|--------------------------------------|--|
| <b>Hazardous combustion products</b> | Carbon oxides, Nitrogen oxides (NOx)   |
| <b>Advice for firefighters</b>       | 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

|                             |  |
|-----------------------------|--|
| <b>Personal precautions</b> | Use personal protective equipment as required. Keep people away from and upwind of spill/leak. |
|-----------------------------|--|

#### 6.2. Environmental precautions

|                                  |   |
|----------------------------------|---|
| <b>Environmental precautions</b> | Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. |
|----------------------------------|---|

#### 6.3. Methods and material for containment and cleaning up

|                                 |  |
|---------------------------------|--|
| <b>Methods for containment:</b> | 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.  |
| <b>Methods for cleaning up:</b> | 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. |

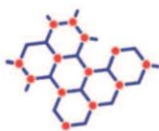
### 7. Handling and storage

#### 7.1. Precautions for safe handling

|                                 |  |
|---------------------------------|--|
| <b>Advice on safe handling:</b> | 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.<br>Keep out of the reach of children.<br>Reportedly, Light sensitive.<br>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 |
|--------------------|--|

### 8.2. Exposure controls

|                                  |   |
|----------------------------------|---|
| Appropriate engineering controls | Showers, Eyewash stations, Ventilation systems<br>Avoid contact with skin, eyes and clothing.<br>Wash hands before breaks and immediately after handling the product.<br>Use fumehood for routine work. |
|----------------------------------|---|

### 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. |

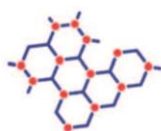
## 9. Physical and chemical properties

### 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

|  |   |
|--|---|
| <b>11.1.1. Acute Toxicity</b>                        |   |
| 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.   |
| <b>11.1.2. Germ cell mutagenicity:</b>               | Negative.   |
| <b>11.1.3. Carcinogenicity:</b>                      | No evidence of carcinogenicity in animal studies. |
| <b>11.1.4. Reproductive toxicity/Teratogenicity:</b> | 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 ) |
|--------------|----------------------------|

## 12. Ecological Information

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

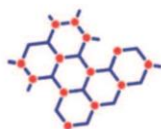
## 13. Disposal Considerations

### 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<br>UN proper shipping name   | 1648 Acetonitrile<br>Class 3 Flammable liquid | 1648 Acetonitrile<br>Class 3 Flammable liquid | 1648 Acetonitrile<br>Class 3 Flammable liquid | 1648 Acetonitrile<br>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

|                          |                |
|--------------------------|----------------|
| Exempted quantities (EQ) | Not applicable |
|--------------------------|----------------|

## 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)<br>ANNEX III: Not Listed<br>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**

