Safety Data Sheet

TdT Cell Suspension – Supertechs Cat# 9500

Revision 1.2.1 - Valid as of 2022-06-07

Section 1: Identification

1.1 Product Identifier

Product Name	TdT Cell Suspension
Catalog Number	9500

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Material Use	Laboratory
Product Use	Assay Control

1.3 Details of the Supplier of the Safety Data Sheet

Supplier/Manufacturer	Supertechs, Inc. 15800 Gaither Dr, Suite 215 Gaithersburg, MD 20877 +1 (301) 309-6695
Email	info@supertechsinc.com

1.4 Emergency Telephone Number

24h Emergency Contact	Chemtrec: +1 800 424-9300 (USA); +1 703 527-3887 (International)

Section 2: Hazards Identification

2.1 Classification of the Substance or Mixture

Product Description	Mixture - White, Turbid, Liquid, Faint Ammonia-like Odor
OSHA/HCS	Not classified as hazardous by 29 CFR 1910.1200
EC 1272/2008 (CLP/GHS)	Not classified as hazardous
EC 1999/45/EC & 67/548/EEC	Xn; R22 (Harmful if swallowed)

2.2 GHS Label Elements

Signal Word	No signal word
Hazard Statements	No known significant effects or critical hazards

Precautionary Statements

Preventions	Not applicable
Response	Not applicable
Storage	Not applicable
Disposal	Not applicable

2.3 Other Hazards

Hazards Not Specified	Product contains concentrations of azide below the concentrations which with repeated contact with lead and copper commonly found in plumbing drains may result in the buildup of shock sensitive compounds. Sodium azide forms explosive compounds with heavy metals. Product contains materials of animal origin.

Section 3: Composition/Information on Ingredients

3.1 Hazardous Ingredients

Chemical Name	% by wt	EU-67/548/EEC	EC 1272/2008 CLP/GHS	GHS
Sodium Azide CAS# 26628-22-8 EINECS# 248-852-1 Index# 011-004-00-7	0.1%	T+;R28-32 N;R50/53	Acute Tox. Oral 2 Aquatic Acute 1 Aquatic Long-term 1 H300; H400; H410	Acute Tox. Oral 2 Aquatic Acute 1 Aquatic Long-term 1 H300; H400; H410
Paraformaldehyde CAS# 30525-89-4 EINECS# 608-494-5 Index# 605-001-00-5	1.0%	T;R23-25,39,43,45	Carc. 1B: H350 Acute Tox. 3 H301; H311; H331	Carc. 1B: H350 Acute Tox. 3 H301; H311; H331

Section 4: First Aid Measures

4.1 Description of First Aid Measures

Eye Contact	Immediately flush eyes with water, occasionally lifting upper and lower eyelids to allow evacuation by water. Check for and remove contact lenses. Get medical attention if irritation occurs.
Ingestion	Wash mouth out with water. Do not induce vomiting unless directed by a medical professional. Give small quantities of water to drink.
Inhalation	Transfer victim to fresh air and keep at rest in a position comfortable for unlabored breathing. Seek medical attention if symptoms occur. In case of inhalation of decomposition products during fire, symptoms may be delayed. Exposed person may need to be evaluated throughout a 48-hour period.
Skin Contact	Flush contaminated skin with water. Remove contaminated clothing and shoes.

4.2 Most Important Symptoms/Effects, Acute and Delayed

No adverse symptoms or effects have been identified.

4.3 Indication of any Immediate Medical Attention and Special Treatment Needed

No specific medical attention or treatment required unless complications occur.

Section 5: Fire Fighting Measures

Flammable Properties	Nonflammable aqueous solution

5.1 Extinguishing Media

Suitable Extinguishing Media	Utilize an extinguishing agent suitable for the surrounding fire
Unsuitable Extinguishing Media	None known

5.2 Special Hazards Arising from the Substance or Mixture

Specific Fire and Explosion Hazards	No special hazards determined
Hazardous Thermal Decomposition Products	Decomposition products may include: carbon dioxide, carbon monoxide, nitrogen oxides, and sulfur oxides

5.3 Advice for Firefighters

Protective Actions	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action should be taken involving any personal risk or without suitable training
Protective Equipment	Self-contained breathing apparatus is recommended for firefighters in all chemical fire situations

Section 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures

Personal Precautions	This product contains a material of animal origin. Observe general safety guidelines for protection during clean up procedures. Wear protective gloves, protective, clothing, and eye/face protection

6.2 Environmental Precautions

Contain any spill to prevent migration. Do not allow undiluted product to enter sewers/surface or ground water. Dispose of contents/container in accordance with local regulations

6.3 Methods and Material for Containment and Cleaning Up

Spill and Leak Procedures	As a precautionary measure, treat spilled material with a 1:10 bleach/water solution. Absorb liquid and place in container suitable for disposal.

Section 7: Handling and Storage

7.1 Precautions for Safe Handling

Protective Measures	Don appropriate personal protective equipment
Advice on General Occupational Hygiene	Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Wash hands and face after use or direct contact. Remove contaminated clothing before entering eating spaces.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Store according to specifications found on product label

7.3 Specific End Uses

Recommendations	Professional applications

Section 8: Exposure Controls and Personal Protection

8.1 Control Parameters

Exposure Limits

US OSHA

Sodium Azide CAS# 26628-22-8	None established
Formaldehyde CAS# 30525-89-4	PEL: 0.75 ppm ceiling (in air) as an 8-hour TWA STEL: 2.00 ppm ceiling (in air)

ACGIH

Sodium Azide CAS# 26628-22-8	0.29 mg/m³ ceiling (as NaN_3); 0.11 ppm ceiling (as Hydrazoic acid [vapor])
Formaldehyde CAS# 30525-89-4	0.37 mg/m³ ceiling

IOELV

Sodium Azide CAS# 26628-22-8	Potential for uptake through skin; 0.1 mg/m³ TWA; 0.3 mg/m³ STEL
Formaldehyde CAS# 30525-89-4	0.3 mg/m³ TWA; 0.6 mg/m³ STEL

NIOSH

Sodium Azide CAS# 26628-22-8	None established
Formaldehyde CAS# 30525-89-4	0.016 ppm TWA, 0.1 ppm 15-minute ceiling; potential carcinogen [29 CFR 1990]

8.2 Exposure Controls

Engineering Controls	Good general ventilation sufficient for mitigating exposure to contaminants
Eye Protection	Safety glasses recommended. Refer to US OSHA 29 CFR 1910.133, European Standard EN166, or other regulations location dependent.
Skin Protection	Non-permeable gloves recommended. Refer to US OSHA 29 CFR 1910.138, European Standard EN374, or other regulations location dependent.
Respiratory Protection	Under normal conditions with proper ventilation, respiratory protection not required
Environmental Exposure Control	Filtration systems and routine emissions from ventilation should be checked to ensure compliance with local environmental regulations.

Section 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical State	Liquid
Color	White
Transparency	Turbid
Odor	Faint Ammonia/Formaldehyde
pH	6.8
Melting Point	0°C (32°F)
Boiling Point	100°C (212°F)
Flash Point	Not applicable
Evaporation Rate	Not determined
Flammability (Solid, Gas)	Not applicable
Flammability Limits	Not applicable
Vapor Pressure	Not determined
Vapor Density	Not determined
Odor Threshold	Not determined
Specific Gravity	1.005 (at 20°C)
Solubility (Water)	Immiscible

Section 10: Stability and Reactivity

10.1 Reactivity

No specific test data related to reactivity is available

10.2 Chemical Stability

Product stable

10.3 Possibility of Hazardous Reactions

Sodium azide has been known to react with lead and copper but is not present at significant enough concentrations to produce complications

10.4 Conditions to Avoid

Do not allow to freeze, avoid exposure to heat and direct sunlight

10.5 Incompatible Materials

Heavy metals and oxidizing materials

10.6 Hazardous Decomposition Products

Under normal conditions, hazardous decomposition products will not be produced

Section 11: Toxicological Information

11.1 Information on Toxicological Effects

Toxicity Data for Hazardous Ingredients	Oral LD_{50} Rat 42 mg/kg
Primary Routes of Exposure	Ingestion, Inhalation, skin contact
Mutagenicity	Not determined
Carcinogenicity	Not determined
Reproductive Toxicity	Not determined
Specific Target Organ Toxicity (Single Exposure)	Not determined
Specific Target Organ Toxicity (Repeated Exposure)	Not determined
Aspiration Hazard	Not determined

Potential Acute Health Effects

Eye Contact	No known significant effects or hazards
Inhalation	No known significant effects or hazards
Skin Contact	No known significant effects or hazards
Ingestion	No known significant effects or hazards

Potential Chronic Health Effects

General	No known significant effects or hazards
Carcinogenicity	No known significant effects or hazards
Mutagenicity	No known significant effects or hazards
Developmental Effects	No known significant effects or hazards
Fertility Effects	No known significant effects or hazards

Section 12: Ecological Information

12.1 Toxicity

Fresh Water Species

Sodium Azide CAS # 26628-22-8	96 h LC_{50} Oncorhynchus mykiss 0.8 mg/L; 96 h LC_{50} Lepomis machrochirus 0.7 mg/L; 96 h LC_{50} Pimephales promelas 5.46 mg/L
Formaldehyde CAS# 30525-89-4	96 h LC_{50} Puntius gonionotus Bleeker 67 mg/L; 96 h LC_{50} Cyprinus carpio Linn 106 mg/L; Channa striatus Flower 147 mg/L

12.2 Persistence and Degradability

Sodium Azide CAS # 26628-22-8	Not determined
Formaldehyde CAS# 30525-89-4	Expected to readily biodegrade when released into water

12.3 Bioaccumulative Potential

Sodium Azide CAS # 26628-22-8	Not determined
Formaldehyde CAS# 30525-89-4	Not expected to bioaccumulate

12.4 Mobility in Soil

Not determined

12.5 Other Adverse Effects

No known significant effects or hazards

Section 13: Disposal Considerations

13.1 Waste Treatment Methods

Product Waste Disposal

Disposal of this product and solutions containing this product should comply with local requirements for environmental and health and safety precautions as well as waste disposal legislation dictated by local orders. A licensed contractor is recommended for surplus, expired, and related product (such as packaging).
A relevant ingredient, Sodium azide, may form explosive compounds in metal drain lines due to reactivity. To avoid accumulation in plumbing, flush drains with water before, during, and after disposal of diluted or undiluted reagent. However, Sodium azide concentrations are sufficiently low that they should not pose any issue unless large amounts of product are used.
Empty containers may contain some residue and should be decontaminated before being added to general waste or recycling.

Section 14: Transport Information

14.1 Transport Regulations

Transportation is not regulated by US DOT, TDG, IMDG, Mexico, IATA, & ADR

Section 15: Regulatory Information

15.1 Safety, Health, and Environmental Regulations/Legislation Specific for the Substance or Mixture

US Federal Regulations

TSCA 8(a) CDR Exempt/ Partial Exemption	Not determined
Clean Air Act Section 112 (b) Hazardous Air Pollutants	Not listed
Clean Air Act Section 602 Class I Substances	Not listed
Clean Air Act Section 602 Class II Substances	Not listed
DEA List I Chemicals (Precursor Chemicals)	Not listed
DEA List II Chemicals (Essential Chemicals)	Not listed

SARA 302/304

Composition/Information on Ingredients

Chemical Name	% by wt	EHS	SARA 302 TPQ		SARA 304 RQ	
Sodium Azide	0.1%	Yes	500 lbs	- gallons	1000 lbs	- gallons
Paraformaldehyde	1.0%	No	-	-	-	-

SARA 311/312

Classification	Not applicable

State Regulations

Massachusetts	No components listed
New York	No components listed
New Jersey	No components listed
Pennsylvania	No components listed
California Prop. 65	Does not require a Safe Harbor warning

International Regulations	
Chemical Weapon Convention List Schedules I, II, & III Chemicals	Not listed
Montreal Protocol	Not listed
Stockholm Convention on Persistent Organic Pollutants	Not listed
Rotterdam Convention on Prior Informed Consent (PIC)	Not listed
UNECE Aarhus Protocol on POPs and Heavy Metals	Not listed

Section 16: Other Information

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Key to Abbreviations	ADR – European Agreement Concerning the International Carriage of Dangerous Goods by Road ATE – Acute Toxicity Estimate BCF – Bioconcentration Factor CLP – Classification, Labeling, and Packaging GHS – Globally Harmonized System of Classification and Labelling of Chemicals HCS – Hazard Communication Standard IATA – International Air Transport Association NIOSH – National Institute for Occupational Safety and Health NTP – National Toxicology Program OSHA – Occupational Safety and Health Administration SARA – Superfund Amendments and Reauthorization Act TDG – Canadian Transportation of Dangerous Goods Regulations UN GHS – United Nations Globally Harmonized System US DOT – United States Department of Transportation PEL – Permissible Exposure Limit TWA – Time-weighted Average STEL – Short-term Exposure Limit