

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier**

**Product Name** Trace Elements C, 1000x  
**Product Code** 25-023

**Other means of identification**

**Pure substance/mixture** Mixture

**Recommended use of the chemical and restrictions on use**

**Recommended Use** For research use only. Not Intended for Diagnostic or Therapeutic Use.

**Details of the supplier of the safety data sheet**

**Company Name** Mediatech Inc., A Corning Subsidiary  
9345 Discovery Blvd.  
Manassas, VA 20109  
USA  
+1.703.471.5955

**E-mail address** ScientificSupport@corning.com

**Emergency telephone number**

Chemtrec: +1-800-424-9300 (USA), +1-703-527-3887 (International; Call collect)

**2. HAZARDS IDENTIFICATION****Classification**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

**Label elements**

**Signal word** None

**Hazard statements** Not Hazardous

**Hazards not otherwise classified (HNOC)**

None

**Unknown Acute Toxicity**

0.00184% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Mixtures**

Chemical Name	CAS No	Weight-%
Barium acetate	543-80-6	<0.001
Cadmium chloride	10108-64-2	<0.001
Chromic chloride	10025-73-7	<0.001
Silver nitrate	7761-88-8	<0.001

The product contains no substances which at their given concentration, are considered to be hazardous to health

**4. FIRST AID MEASURES****First aid measures**

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Call a physician.

<b>Skin Contact</b>	Wash off immediately with soap and plenty of water.
<b>Eye contact</b>	Rinse thoroughly with plenty of water, also under the eyelids.
<b>Ingestion</b>	If swallowed, rinse mouth with water (only if the person is conscious).

**Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** No information available.

**Specific hazards arising from the chemical**

No information available

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment as required. Avoid breathing dust/fume/gas/mist/vapors/spray

**Environmental precautions**

See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

No special precautions are needed in handling this material. Wipe up with damp sponge or mop.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.  
**Incompatible materials** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Barium acetate	TWA: 0.5 mg/m <sup>3</sup> Ba	TWA: 0.5 mg/m <sup>3</sup> Ba (vacated) TWA: 0.5 mg/m <sup>3</sup> Ba	TWA: 0.5 mg/m <sup>3</sup> except Barium sulfate Ba
Cadmium chloride	TWA: 0.01 mg/m <sup>3</sup> Cd TWA: 0.002 mg/m <sup>3</sup> Cd respirable fraction	-	IDLH: 9 mg/m <sup>3</sup> Cd dust and fume
Chromic chloride	TWA: 0.5 mg/m <sup>3</sup> Cr	TWA: 0.5 mg/m <sup>3</sup> Cr (vacated) TWA: 0.5 mg/m <sup>3</sup> Cr	IDLH: 25 mg/m <sup>3</sup> Cr(III) TWA: 0.5 mg/m <sup>3</sup> Cr
Silver nitrate	TWA: 0.01 mg/m <sup>3</sup> Ag	TWA: 0.01 mg/m <sup>3</sup> Ag (vacated) TWA: 0.01 mg/m <sup>3</sup> Ag	IDLH: 10 mg/m <sup>3</sup> Ag TWA: 0.01 mg/m <sup>3</sup> Ag

**Appropriate engineering controls**

**Engineering Controls** Ensure adequate ventilation, especially in confined areas.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Hand Protection** Wear protective nitrile rubber gloves.

**Skin and body protection** Suitable protective clothing.

**Respiratory protection** None under normal use conditions.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly after handling.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	No information available
<b>Appearance</b>	clear	<b>Odor threshold</b>	No information available
<b>Color</b>	colorless		

<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>
<b>pH</b>	No information available	
<b>Melting point/freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	No information available	
<b>Flash point</b>	No information available	
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	No information available	
<b>Specific Gravity</b>	No information available	
<b>Water solubility</b>	No information available	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Oxidizing properties</b>	No information available	
<b>Explosive properties</b>	No information available	

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under normal conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

None known.

**Incompatible materials**

Strong oxidizing agents.

**Hazardous Decomposition Products**

None under normal use conditions

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### **Product Information**

No acute toxicity information is available for this product

#### **Information on toxicological effects**

**Symptoms** No information available.

#### **Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** This product does not contain any any components at levels greater than or equal to 0.1% that have been identified as probable, possible or confirmed human carcinogens by OSHA, IARC or NTP.

**Reproductive toxicity** No information available.

**Developmental Toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

#### **Unknown Acute Toxicity**

0.00184% of the mixture consists of ingredient(s) of unknown toxicity

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Cadmium chloride	3.7: 96 h Chlorella vulgaris mg/L EC50 static	0.0409: 96 h Pimephales promelas mg/L LC50	-	0.012 - 0.054: 48 h Daphnia magna mg/L EC50
Silver nitrate	-	0.001339 - 0.001637: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.00181 - 0.00214: 96 h Pimephales promelas mg/L LC50 static 0.00452 - 0.00638: 96 h Pimephales promelas mg/L LC50 flow-through 0.00512 - 0.00787: 96 h Poecilia reticulata mg/L LC50 semi-static 0.0064 - 0.0106: 96 h Pimephales promelas mg/L LC50 semi-static 0.00839 - 0.1802: 96 h Oncorhynchus mykiss mg/L LC50 static 0.009 - 0.02: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.0242 - 0.0484: 96 h Lepomis macrochirus mg/L LC50 semi-static 0.05 - 0.07: 96 h Lepomis macrochirus mg/L LC50 static 0.0027: 96 h Cyprinus carpio mg/L LC50 semi-static 0.0075: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.009: 96 h Pimephales promelas mg/L LC50	-	0.0008 - 0.001: 48 h Daphnia magna mg/L EC50 Flow through 0.0008 - 0.0011: 48 h Daphnia magna mg/L EC50 Static 0.0006: 48 h Daphnia magna mg/L EC50

#### **Persistence and degradability**

No information available.

#### **Bioaccumulation**

No information available

#### **Mobility in soil**

No information available.

#### **Other adverse effects**

No information available

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

##### **Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

##### **Contaminated packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

### 14. TRANSPORT INFORMATION

**DOT** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

### 15. REGULATORY INFORMATION

#### International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Barium acetate	X	X	-	X	-	X	X	-	X	X
Cadmium chloride	X	X	-	X	-	X	X	X	X	X
Chromic chloride	X	X	-	X	-	X	X	X	X	X
Silver nitrate	X	X	-	X	-	X	X	X	X	X

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

#### US Federal Regulations

##### **SARA 311/312 Hazard Categories**

None

#### US State Regulations

##### **California Proposition 65**

Chemical Name	California Proposition 65
Cadmium chloride (CAS #: 10108-64-2)	Carcinogen

##### **U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Barium acetate (CAS #: 543-80-6)	X	-	X
Cadmium chloride (CAS #: 10108-64-2)	X	X	X
Chromic chloride (CAS #: 10025-73-7)	X	X	X
Silver nitrate (CAS #: 7761-88-8)	X	X	X

### 16. OTHER INFORMATION

Version 1

Revision Date

14-Jul-2017

Revision Note

Not Applicable

**Disclaimer**

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**End of Safety Data Sheet**