

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

071377043

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

071200385

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

071030311 071030329 078913963

**ICX<sup>®</sup>**  
**by A-dec, Inc.**  
**SAFETY DATA SHEET**

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1 Product Identifier:**

**Trade Name:** ICX<sup>®</sup>

**SDS Date of Preparation:** 05/12/2022

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

**Product Use:** Use to maintain dental unit waterlines and prevent accumulation of odor and foul taste bacteria. Use only according to label directions.  
It is a violation of Federal law to use this product in a manner inconsistent to label directions.

**Uses Advised Against:** None known.

**1.3 Details of the Supplier of the Safety Data Sheet:**

**Manufacturer:** **A-dec, Inc.**  
2601 Crestview Dr.  
Newberg, OR 97132  
Tel: 1.800.547.1883 within USA/CAN  
Tel: +1.503.538.7478 outside USA/CAN  
Fax: 1.503.537.2702  
Website: www.a-dec.com

**Distributors:**

**A-dec Australia**  
Unit 8  
5-9 Ricketty Street  
Mascot, NSW 2020  
Australia

Tel: 1.800.225.010 within AU

Tel: +61.(0).2.8332.4000 outside AU

**A-dec China**

A-dec (Hangzhou) Dental Equipment  
Co., Ltd.

528 Shunfeng Road

Qianjiang Economic Development  
Zone

Hangzhou 311106

Zhejiang, China

Tel: 400.600.5434 within China

Tel: +86.571.89026088 outside China

**A-dec United Kingdom**

Austin House, 11 Liberty Way  
Nuneaton, Warwickshire CV11 6RZ  
England

Tel: 0800.ADEC.UK (2332.85) within UK

Tel: +44.(0).24.7635.0901 outside UK

**1.4 Emergency Telephone Number:**

Contact the A-dec Distributor, listed in section 1.3, closest to your location.

For SDS information guidance, contact INFOTRAC:

1.800.535.5053 – within USA/CAN

1.352.323.3500 – outside USA/CAN

Australia Poison Information Centre: 131 126

**SECTION 2: HAZARDS IDENTIFICATION**

**2.1 Classification of the Substance or Mixture:**

The GHS classification below is for the product in its concentrated form as sold. The diluted form in water, may not present these hazards.

Physical:	Health:	Environment:
Not Hazardous	Eye Irritation Category 2B (H320) Specific Target Organ Toxicity Single Exposure Category 3 (H335)	Aquatic Acute Toxicity Category 1 (H400) Aquatic Chronic Toxicity Category 1 (H410)

## 2.2 Label Elements:

Warning!



Contains: Silver Nitrate, Cationic Surfactant, Tetrasodium EDTA Dihydrate

### Statements of Hazard

H320 Causes eye irritation.

H335 May cause respiratory irritation.

H410 Very toxic to aquatic life with long lasting effects.

### Precautionary Phrases

P261 Avoid breathing dust.

P264 Wash thoroughly after handling.

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

P273 Avoid release to the environment.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER or doctor if you feel unwell.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical attention.

P391 Collect spillage.

P402 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents and container in accordance with local, state, and national regulations.

2.3 Other Hazards: None known.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixture:

Chemical Name	CAS# / EINECS#/ Reach Registration #	GHS Classification	%	ATE/ Specific Concentration limits/ M-Factor
Citric Acid	77-92-9 / 201-069-1	Eye Irrit. 2A, H319 STOT SE 3, H335	35-45	None
Tetrasodium EDTA Dihydrate	10378-23-1	Acute Tox. 4, H302 Eye Dam. 1, H318	<10	ATE oral: 1780-2000 mg/kg
Sodium Carbonate Peroxyhydrate	15630-89-4/ 239-707-6	Oxid. Solid 3, H272 Acute Tox. 4, H302 Eye Dam. 1, H318	<10	ATE oral: 1034 mg/kg SCL: >25% Eye Dam. 1 SCL: 7.5-25% Eye Irrit. 2
Sodium Benzoate	532-32-1/ 208-534-8	Eye Irrit. 2A, H319	<3	None
Cationic Surfactant	Proprietary	Acute Tox. 4, H302	<1	Acute M-Factor: 1

		Skin Corr. 1B, H314 Aquatic Acute 1, H400		
Silver Nitrate	7761-88-8/ 231-853-9	Oxid. Solid 1, H271 Met. Corr. 1, H290 Skin Corr. 1B, H314 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	<0.5	Acute M-Factor: 1000 Chronic M-Factor: 100

The exact concentration is being withheld as a trade secret.

Refer to Section 16 for the full text of the GHS Classifications.

#### SECTION 4: FIRST AID MEASURES

##### 4.1 Description of First Aid Measures:

**Eye:** If dust particles enter eyes, do not rub eyes. Flush eyes with large quantities of water for several minutes, while holding the eyelids apart. Get medical attention if irritation persists.

**Skin:** If contact with dust occurs, flush thoroughly with water for several minutes. Get medical attention if irritation occurs. Remove and launder clothing before re-use.

**Inhalation:** If dust is inhaled, remove victim to fresh air. Get medical attention if you feel unwell.

**Ingestion:** If small quantities of dust are swallowed, give one glass of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If large amounts of dust are swallowed or discomfort occurs, get medical attention.

**4.2 Most Important symptoms and effects, both acute and delayed:** Direct contact with dust may cause moderate eye irritation. Direct contact with dust cause slight skin irritation. Inhalation of dust may cause respiratory tract irritation.

**4.3 Indication of any immediate medical attention and special treatment needed:** Immediate medical attention is not required.

#### SECTION 5: FIRE-FIGHTING MEASURES

**5.1 Extinguishing Media:** Use any media that is suitable for the surrounding fire.

**5.2 Special Hazards Arising from the Substance or Mixture:** This product is not flammable or combustible. Thermal decomposition may release oxides of carbon, nitrogen, and sodium.

**5.3 Advice for Fire-Fighters:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water spray. Contain water used in fire incidences involving the undiluted product.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1 Personal Precautions, Protective Equipment and Emergency Procedures:** Isolate the area and remove unprotected people. Wear suitable protective clothing to prevent skin and eye contact. Ventilate the area.

##### 6.2 Environmental Precautions:

Avoid releases to the environment. Report releases as required by local, state and federal authorities.

**6.3 Methods and Material for Containment and Cleaning Up:** Scoop or shovel up using methods that minimize the generation of airborne dust. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Place dry material into an appropriate container for disposal. Clean the area with large quantities of water. Comply with Federal, State, or local regulations on reporting spills.

#### 6.4 Reference to Other Sections:

Refer to Section 8 for Personal Protective Equipment and Section 13 for Disposal information.

### SECTION 7: HANDLING AND STORAGE

**7.1 Precautions for Safe Handling:** Avoid contact with eyes, skin, and clothing. Wear protective clothing and equipment. Do not breathe dust. Use only with adequate ventilation. Wash thoroughly with water after handling. Keep containers closed when not in use. Wash clothing before re-use.

Do not reuse containers. Empty containers retain product residues which can be hazardous. Follow all SDS precautions when handling empty containers.

**7.2 Conditions for Safe Storage, Including any Incompatibilities:** Keep in a closed container in a cool, dry, ventilated area when not in use. Keep away from oxidizers and other incompatible materials. Avoid contact with water until ready for use. Protect against physical damage. All cleaners and pesticides should be kept out of the reach of children and stored away from food. Avoid touching tablet with unprotected skin.

**7.3 Specific end use(s):** This product is intended for use with potable water and in conjunction with regular dental unit water testing, following flush (shock) treatment with an antimicrobial product registered with the U.S. EPA and recommended by the manufacturer.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control Parameters:

Chemical Names	Exposure Limits
Citric Acid	5 mg/m <sup>3</sup> (respirable fraction), 15 mg/m <sup>3</sup> (total dust) TWA OSHA PEL (as PNOC) 2 mg/m <sup>3</sup> TWA, 4 mg/m <sup>3</sup> STEL DFG MAK (inhalable)
Tetrasodium EDTA Dihydrate (as PNOC) Sodium Carbonate Peroxyhydrate (as PNOC) Cationic Surfactant (as PNOC)	5 mg/m <sup>3</sup> (respirable fraction), 15 mg/m <sup>3</sup> (total dust) TWA OSHA PEL 4 mg/m <sup>3</sup> TWA DFG MAK (Inhalable)
Sodium Benzoate	5 mg/m <sup>3</sup> (respirable fraction), 15 mg/m <sup>3</sup> (total dust) TWA OSHA PEL (as PNOC) 10 mg/m <sup>3</sup> TWA, 20 mg/m <sup>3</sup> STEL German AGS OEL (inhalable) (skin) 4 mg/m <sup>3</sup> TWA DFG MAK (Inhalable) (as Dust, general threshold limit value)
Silver Nitrate (as silver, soluble compounds, as Ag)	0.01 mg/m <sup>3</sup> TWA ACGIH TLV 0.01 mg/m <sup>3</sup> TWA OSHA PEL 0.01 mg/m <sup>3</sup> TWA UK WEL 0.01 mg/m <sup>3</sup> TWA EU OEL (total dust) 0.01 mg/m <sup>3</sup> TWA AU OEL

\*Particles Not Otherwise Classified (PNOC) exposure limits only apply if dust is generated.

#### 8.2 Exposure Controls:

**Appropriate Engineering Controls:** Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

#### Personal Protective Equipment:

**Respiratory Protection:** In operations where exposure levels are excessive, an approved respirator with dust/mist cartridges or supplied air respirator should be used. Respirator selection and use should be based on contaminant type, form, and concentration. Follow applicable regulations and good Industrial Hygiene practice.

**Skin Protection:** Follow facility requirements for operation. Chemical resistant gloves are recommended to prevent prolonged skin contact. Contact your glove supplier for assistance in selecting an appropriate glove.

**Eye/Face Protection:** Chemical safety glasses or dust goggles are recommended to avoid eye contact.

**Other:** Impervious coveralls, apron and boots are required to prevent prolonged skin contact and contamination of personal clothing.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on Basic Physical and Chemical Properties:

<b>Physical State:</b> Solid	<b>Vapor Density:</b> Not applicable
<b>Appearance:</b> Solid white tablet	<b>Relative Vapor Density (at 20°C):</b> Not applicable
<b>Color:</b> White	<b>Specific Gravity:</b> Not determined
<b>Odor:</b> Nil	<b>Density/Relative Density:</b> 1.5-1.7 g/cm <sup>3</sup>
<b>Odor Threshold:</b> Not determined	<b>Solubility(ies):</b> Soluble in water
<b>Melting Point/Freezing Point:</b> Not determined	<b>Octanol/Water Partition Coefficient:</b> Not applicable
<b>Boiling Point/Range:</b> Not applicable	<b>Auto-ignition Temperature:</b> Not applicable
<b>pH:</b> The pH of ICX-treated water will depend on the type of water used.	<b>Decomposition Temperature:</b> Not determined
<b>Flash Point:</b> Not applicable	<b>Kinematic Viscosity:</b> Not applicable
<b>Evaporation Rate:</b> Not applicable	<b>Particle Characteristics:</b> Not applicable
<b>Explosive Limits:</b> LEL: Not applicable UEL: Not applicable	<b>Flammability (gas, liquid, solid):</b> Not flammable or combustible
<b>Vapor Pressure:</b> Not applicable	<b>Particle Characteristics:</b> Not determined
<b>Saturated Vapor Concentration:</b> Not applicable	<b>Particle Size:</b> Not determined
<b>Release of Invisible Flammable Vapors and Gases:</b> Not applicable	

### 9.2 Other Information:

9.2.1 Information with regard to physical hazard classes: Not applicable

9.2.2 Other Safety Characteristics: Not applicable

## SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: Not normally reactive.

10.2 Chemical Stability: Stable under normal storage and handling conditions.

10.3 Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4 Conditions to Avoid: Avoid elevated temperatures.

10.5 Incompatible Materials: Strong oxidizers, strong acids, bases, nitrates, and soluble metal chelates.

10.6 Hazardous Decomposition Products: When heated to decomposition emits oxides of carbon, nitrogen and sodium.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on Toxicological Effects:

**Potential Health Effects:**

**Eye:** Direct contact with dusts may cause moderate irritation.

**Skin:** Direct skin contact with dusts may cause slight skin irritation.

**Inhalation:** Inhalation of dust may cause irritation of the nose, throat and respiratory tract.

**Ingestion:** Ingestion of large amount of dust may cause gastrointestinal irritation, nausea and vomiting.

**Chronic Hazards:** Prolonged or repeated inhalation exposure may damage respiratory tract.

**Acute Toxicity Values:**

Product: Oral rat LD50: >5000 mg/kg, Inhalation rat LC50: >2.09 mg/L/4hr (no mortality),

Skin rat LD50: >5000 mg/kg

**Skin Corrosion/Irritation:** This product causes slight skin irritation. Based on the available data, the classification criteria are not met.

**Serious Eye Damage/Irritation:** This product causes moderate eye irritation. The product is classified as a mild eye irritant. Based on the available data, the classification criteria are not met.

**Respiratory or Skin Sensitization:** Based on the results of a dermal sensitization study the classification criteria are not met.

**Germ Cell Mutagenicity:** Based on the available data, the classification criteria are not met.

**Carcinogenicity:** None of the components of this product are listed as carcinogens by OSHA, IARC, NTP, or the EU CLP.

**Reproductive Toxicity:** Based on the available data, the classification criteria are not met.

**Specific Target Organ Toxicity:**

**Single Exposure:** Based on the available data, the classification criteria are not met.

**Repeat Exposure:** Prolonged inhalation to Tetrasodium EDTA Dihydrate may damage the respiratory tract.

**Aspiration Hazard:** Based on the available data, the classification criteria are not met.

**11.2 Information on other hazards:** Not applicable

**11.2.1 Endocrine disrupting properties:** Not applicable

**11.2.2 Other information:** Not applicable

<b>SECTION 12: ECOLOGICAL INFORMATION</b>
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**12.1 Toxicity:**

No data available for the mixture or for product as diluted in use. The following information is for the individual components:

Silver Nitrate: 96 hr LC50 Fathead minnow: 1.2 ug/L, 48 hr LC50 Daphnia magna: 0.22 ug/L,  
(M-Factor Acute: 1000, M-Factor Chronic: 100)

Some components, when in solid form and in large quantities, may be expected to be very toxic to the aquatic environment. Releases to the environment should be avoided. Product as used and diluted is not anticipated to be unusually hazardous to the environment; however, releases to non-treated water supplies should be avoided.

**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 Results of PBT and vPvB Assessment:** No data available

**12.6 Endocrine disrupting properties:** None known.

**12.7 Other adverse effects:** None known.

<b>SECTION 13: DISPOSAL CONSIDERATIONS</b>
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**13.1 Waste Treatment Methods:**

Dispose in accordance with local and national environmental regulations.

<b>SECTION 14: TRANSPORTATION INFORMATION</b>
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	<b>14.1 UN Number</b>	<b>14.2 UN Proper Shipping Name</b>	<b>14.3 Hazard Class(s)</b>	<b>14.4 Packing Group</b>	<b>14.5 Environmental Hazards</b>
<b>US DOT</b>	None	Not regulated as sold	None	None	Not applicable
<b>Canadian TDG</b>	None	Not Regulated	None	None	Not applicable
<b>EU ADR/RID</b>	None	Not Regulated	None	None	Not applicable
<b>IMDG</b>	None	Not regulated per special provision 335.	None	None	Marine Pollutant
<b>IATA/ICAO</b>	None	Not regulated per special provision A158.	None	None	Marine Pollutant
<b>AU ADG</b>	None	Not Regulated	None	None	Not applicable

Hazchem (Emergency Action) Code: N/A

**14.6 Special Precautions for User:** Not applicable

**14.7 Maritime transport in bulk according to IMO instruments:** Not applicable

<b>SECTION 15: REGULATORY INFORMATION</b>
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**15.1 Safety, Health and Environment Regulations/Legislation Specific for the Substance or Mixture:**

**U.S. FEDERAL REGULATIONS:**

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

**FIFRA Labeling:**

**KEEP OUT OF REACH OF CHILDREN.**

**WARNING**

Hazards to humans and domestic animals.



Causes moderate eye irritation, wear protective eyewear. Avoid contact with eyes, skin or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

**CERCLA 103 Reportable Quantity:** As sold product will not exceed CERCLA reporting requirements. Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

#### **SARA TITLE III:**

**Hazard Category for Section 311/312:** Refer to Section 2 for Hazard Classification.

**Section 313 Toxic Chemicals:** This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

**Section 302 Extremely Hazardous Substances (TPQ):** None

**EPA Toxic Substances Control Act (TSCA) Status:** All of the components of this product are listed on TSCA inventory.

#### **STATE REGULATIONS:**

**California Proposition 65:** This product does not contain substances known in the State of California to cause cancer and/or reproductive harm.

#### **INTERNATIONAL REGULATIONS:**

##### **CANADIAN REGULATIONS**

**Canadian Environmental Protection Act:** This product contains one or several components listed on either the Domestic Substances List (DSL) or Non- Domestic Substances list (NDSL).

##### **EUROPEAN REGULATIONS**

**REACH:** A-dec, Inc. products comply with REACH regulation as applicable. For more information, contact A-dec, Inc.

**SVHC:** This product contains the following Substances of Very High Concern (SVHCs): None

##### **AUSTRALIAN REGULATIONS:**

**Montreal Protocol (Ozone Depleting Substances):** None present

**The Stockholm Convention (Persistent Organic Pollutants):** None present

**The Rotterdam Convention (Prior Informed Consent):** Not applicable

**Basel Convention:** Not applicable

**International Convention for the Prevention of Pollution from Ships (MARPOL):** Not applicable

**Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP):** Not applicable

**Australian Inventory of Chemical Substances:** All the components in this product are listed on the AICS inventory.

**15.2 Chemical Safety Assessment:** None required.

### **SECTION 16: OTHER INFORMATION**

**NFPA Rating:** Health = 1      Flammability = 0      Instability = 0

**HMIS Rating:** Health = 1      Flammability = 0      Physical Hazard = 0

**Revision Summary:**

4/16/2015: New SDS

02/23/2022: Revised SDS. Updated classification. Revised SDS to align with REACH 2020 regulations.

5/12/2022: Revised SDS format.

**GHS Classification for Reference (See Sections 2 and 3):**

Acute Tox. 4 – Acute Toxicity Category 4	H271 May cause fire or explosion; strong oxidizer.
Aquatic Acute 1 – Aquatic Acute Toxicity Category 1	H272 May intensify fire; oxidizer.
Aquatic Chronic 1 – Aquatic Chronic Toxicity Category 1	H290 May be corrosive to metals.
Eye Dam. 1 – Eye Damage Category 1	H302 Harmful if swallowed.
Eye Irrit. 2A – Eye Irritant Category 2A	H314 Causes severe skin burns and eye damage.
Eye Irrit. 2B – Eye Irritant Category 2B	H315 Causes skin irritation.
Met. Corr. 1 – Corrosive to Metals Category 1	H318 Causes serious eye damage.
Oxid. Solid 1 – Oxidizing Solid Category 1	H319 Causes serious eye irritation.
Oxid. Solid 3 – Oxidizing Solid Category 3	H320 Causes eye irritation.
Skin Corr. 1B – Skin Corrosion Category 1B	H332 Harmful if inhaled.
Skin Irrit. 2 – Skin Irritant Category 2	H335 May cause respiratory irritation.
STOT SE 3 – Specific Target Organ Toxicity Single Exposure Category 3	H400 Very toxic to aquatic life.
	H410 Very toxic to aquatic life with long lasting effects.

**List of Abbreviations or Acronyms:**

ACGIH American Conference of Industrial Hygienists

ADG Australian Dangerous Goods

AICS Australian Inventory of Chemical Substances

AU Australia

EU European Union

GHS Globally Harmonized System of Classification and Labelling of Chemicals

IARC International Agency of Research on Cancer

IATA International Air Transport Association

IMDG International Maritime Dangerous Goods

LC Lethal Concentration

LD Lethal Dosage

LEL Lower Explosive Limit

NTP National Toxicology Program

OEL Occupational Exposure Limits

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit

SDS Safety Data Sheet

STEL Short Term Exposure Limit

TWA Time-Weighted Average

UEL Upper Explosive Limit

WHS Work Health and Safety

**NOTICE**

The above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. A-dec, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.

This SDS conforms to the requirements of US HazCom 2012, Canadian WHMIS 2015, EU Regulation No. 2020/878, and Australian WHS 2021. Please contact A-dec, Inc. for more information.