

SAFETY DATA SHEETS

This SDS packet was issued with item:

071030311

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).

071030329 071377043 078913963

ICX[®]

by A-dec, Inc.

MATERIAL SAFETY DATA SHEET**SECTION 1 - GENERAL INFORMATION****ORIGINAL DATE OF ISSUE: 9/15/2003****Product Name:**ICX[®] by A-dec, Inc. - Dental Unit Water Treatment Product
EPA Registration No.: 79662-1**Manufacturer:**A-dec, Inc.
2601 Crestview Dr.
Newberg, OR 97132
www.a-dec.com**Telephone:** 800-547-1883 **Fax:** 503-537-2702**Emergency Telephone:** 503-538-9471**INFOTRAC:** 1-800-535-5053

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and complies with 91/155/EWG for the EU.

SECTION 2 - COMPOSITION

Ingredient Name:	Weight Range:	CAS Number:	EC Number:
Sodium Percarbonate	5 – 15%	15630-89-4	239-707-6
Cationic Surfactants	1 – 3%	68391-01-5	269-919-4
		68956-79-6	273-318-2
Silver Nitrate	0.1 – 0.5%	7761-88-8	231-853-9
Other Ingredients	Components not precisely identified are proprietary or non-hazardous		

SECTION 3 - PHYSICAL DATA

Physical State	Solid (tablet)	Odor	Nil
Color	White	pH (0.01% in distilled water; in-use concentration)	5.2-6.2
Bulk Density	1.5 – 1.7 g/cm ³	Vapor Density (AIR =1)	N/A
Vapor Pressure	N/A	Solubility in water	Complete
Boiling Point	N/A	Melting Point	Unknown

SECTION 4 - FIRE AND EXPLOSION DATA

Flash Point	N/A
Flammable Limits	N/A
Extinguishing Media	Water, CO ₂ or dry chemical.
Special Fire Fighting Instructions	Oxidizing substance.
Fire and Explosion Hazards	None

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SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)

Stability	Stable
Conditions to Avoid	Water, heat, reducing agents.
Incompatibility	N/A
Hazardous Decomposition or By-Products	N/A
Hazardous Polymerization	Will not occur.

SECTION 6 - HEALTH HAZARDS

Eyes:	Causes eye irritation. Avoid contact with eyes. Wear protective eyewear. Wash hands thoroughly after handling.
Skin:	May cause skin irritation. Avoid contact with skin. Wash hands thoroughly with soap and water after handling. Remove contaminated clothing, and wash hands and clothing before reuse.
Inhalation:	None known.
Ingestion:	May be harmful if swallowed. Do not taste or swallow. Wash hands thoroughly after handling.

SECTION 7 - FIRST AID

If in eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If on skin:	Take off contaminated clothing. Rinse skin immediately with water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
If inhaled:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
If ingested:	Loosen tight clothing such as a collar, tie, belt or waistband. Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

SECTION 8 – ACCIDENTAL RELEASE MEASURES

Spills and Leaks:	Recover dry if possible. Clean the area with large quantities of water. Comply with Federal, State or local regulations on reporting spills.
Waste Disposal:	Collect the product with suitable means. Avoid incompatible materials.
Environmental Hazards:	None known. No environmental disturbance is expected from biodegradation. No dangerous product transportation regulations apply.

SECTION 9 - HANDLING AND STORAGE

Keep in a closed container in a cool, dry, ventilated area when not in use. 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.

SECTION 10 - TOXICOLOGICAL INFORMATION

Oral rat LD 50:	>5000 mg/kg
Inhalation rat LC 50:	>2.09 mg/L
Skin rabbit LD 50:	>5000 mg/kg
Sensitization:	Not applicable.

SECTION 11 – OTHER INFORMATION

This product contains Silver Nitrate, which is subject to the reporting requirements under SARA Title III, Section 313 of the Emergency Planning and Community Right-To-Know Act.

Disclaimer:

A-dec, Inc. provides the information contained herein in good faith, but makes no representation as to the comprehensiveness or accuracy of properties as provided by chemical manufacturers. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Regulatory requirements are subject to change and may differ from one location to another. It is the buyer's (or user's) responsibility to ensure that its activities comply with Federal, State and local laws.

SECTION 12 - MSDS PREPARATION

Prepared by:	Deanna Gilbreath Scientific & Regulatory Consultants, Inc.
Reviewed & Updated:	November 28, 2011 Tom Louisell, A-dec, Inc.

ICX[®]
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SAFETY DATA SHEET

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

1.1 Product Identifier:

Trade Name: ICX[®]

SDS Date of Preparation: 4/24/2017

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

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
EU Authorized Representative
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

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 Specific Target Organ Toxicity Repeated Exposure Category 2 (H373)	Aquatic Acute Toxicity Category 1 (H400) Aquatic Chronic Toxicity Category 2 (H411)

2.2 Label Elements:

Warning!



Contains: Silver Nitrate, Cationic Surfactant, Tetrasodium EDTA Dihydrate

Statements of Hazard

H320 Causes eye irritation.

H373 May cause damage to respiratory tract through prolonged or repeated exposure by inhalation.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Precautionary Phrases

P260 Do not breathe dust.

P264 Wash thoroughly after handling.

P273 Avoid release to the environment.

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.

P314 Get medical attention if you feel unwell.

P391 Collect spillage.

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:

Citric Acid	35-45%	Sodium Benzoate	<3%
CAS 77-92-9 / EC 201-069-1		CAS 532-32-1 / EC 208-534-8	
Eye Irrit. 2A, H319		Eye Irrit. 2A, H319	
Tetrasodium EDTA Dihydrate	<10%	Cationic Surfactant	<1%
CAS 10378-23-1 / EC Not listed		Proprietary / Proprietary	
Acute Tox. 4, H302, H332 / Eye Dam. 1, H318 /		Acute Tox. 4, H302 / Skin Corr. 1B, H314 /	
Skin Irrit. 2, H315 / STOT RE 2, H373		Aquatic Acute 1, H400	
Sodium Carbonate Peroxyhydrate	<10%	Silver Nitrate	<0.5%
CAS 15630-89-4 / EC 239-707-6		CAS 7761-88-8 / EC 231-853-9	
Oxid. Solid 3, H272 / Acute Tox. 4, H302 / Eye		Oxid. Solid 1, H271 / Met. Corr. 1, H290 / Skin	
Dam. 1, H318		Corr. 1B, H314 / Aquatic Acute 1, H400 /	
		Aquatic Chronic 1, H410	

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. Prolonged or repeated inhalation of dust may damage the respiratory tract.

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:

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 (as PNOC) Tetrasodium EDTA Dihydrate (as PNOC) Sodium Carbonate Peroxyhydrate (as PNOC) Sodium Benzoate (as PNOC) Cationic Surfactant (as PNOC)	5 mg/m ³ (respirable fraction), 15 mg/m ³ (total dust) TWA OSHA PEL 4 mg/m ³ TWA DFG MAK (Inhalable)
Silver Nitrate (as silver, soluble compounds, as Ag)	0.01 mg/m ³ TWA ACGIH TLV 0.01 mg/m ³ TWA OSHA PEL 0.01 mg/m ³ TWA UK WEL 0.01 mg/m ³ TWA EU OEL (total dust)

*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:

Appearance: Solid white tablet	Vapor Pressure: Not applicable
Odor: Nil	Vapor Density: Not applicable
Odor Threshold: Not available	Relative Density: 1.5-1.7 g/cm ³
pH: The pH of ICX-treated water will depend on the type of water used.	Solubility(ies): Soluble in water
Melting/Freezing Point: Not available	Partition Coefficient Octanol/Water: Not applicable
Initial Boiling Point/Range: Not applicable	Auto-ignition Temperature: Not applicable
Flashpoint: None	Decomposition Temperature: Not available
Evaporation Rate: Not applicable	Viscosity: Not applicable
Flammability (solid, gas): Not flammable or combustible	Explosive Properties: Not explosive
Flammable Limits: LEL: Not applicable UEL: Not applicable	Oxidizing Properties: Contains ingredients that are oxidizers.

9.2 Other Information: None available.

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

Irritation: This product causes slight skin irritation and moderate eye irritation.

Corrosivity: This product showed no signs of corrosivity when tested.

Sensitization: Based on the results of a dermal sensitization study, this product was not considered to be a contact sensitizer.

Carcinogenicity: None of the components is listed as a carcinogen or suspected carcinogen by IARC, NTP, OSHA, or the EU CLP.

Germ Cell Mutagenicity: Not expected to cause germ cell mutagenicity.

Reproductive Toxicity: Not expected to cause reproductive harm.

Specific Target Organ Toxicity:

Single Exposure: None known.

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

SECTION 12: ECOLOGICAL INFORMATION

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 Other Adverse Effects: Not applicable

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:

Dispose in accordance with local and national environmental regulations.

SECTION 14: TRANSPORTATION INFORMATION

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
US DOT	None	Not regulated as sold	None	None	Not applicable
Canadian TDG	None	Not Regulated	None	None	Not applicable
EU ADR/RID	None	Not Regulated	None	None	Not applicable

IMDG	None	Not regulated per special provision 335.	None	None	Marine Pollutant
IATA/ICAO	None	Not regulated per special provision A158.	None	None	Marine Pollutant

14.6 Special Precautions for User: Not applicable

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

SECTION 15: REGULATORY INFORMATION

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: Acute Health, Chronic Health

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 Workplace Hazardous Materials Information System (WHMIS): Class D Division 2B (Toxic material causing other toxic effects)

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).

This SDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the SDS contains all of the information required by the CPR.

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

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

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.
Aquatic Chronic 2 – Aquatic Chronic Toxicity Category 2	H302 Harmful if swallowed.
Eye Dam. 1 – Eye Damage Category 1	H314 Causes severe skin burns and eye damage.
Eye Irrit. 2A – Eye Irritant Category 2A	H315 Causes skin irritation.
Eye Irrit. 2B – Eye Irritant Category 2B	H318 Causes serious eye damage.
Met. Corr. 1 – Corrosive to Metals Category 1	H319 Causes serious eye irritation.
Oxid. Solid 1 – Oxidizing Solid Category 1	H320 Causes eye irritation.
Oxid. Solid 3 – Oxidizing Solid Category 3	H332 Harmful if inhaled.
Skin Corr. 1B – Skin Corrosion Category 1B	H373 May cause damage to organs through prolonged or repeated exposure.
Skin Irrit. 2 – Skin Irritant Category 2	H400 Very toxic to aquatic life.
STOT RE 2 – Specific Target Organ Toxicity Repeated Exposure Category 2	H410 Very toxic to aquatic life with long lasting effects.
	H411 Toxic to aquatic life with long lasting effects.

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.