



## Safety Data Sheet

### Section 1: Identification

**Product Name:** Chlor-XTRA™

**Product Use:** An enhanced 6% sodium hypochlorite solution designed for irrigation, debridement, and cleansing of root canals during and after instrumentation.

**Manufacturer:** Inter-Med, Inc. / Vista Dental Products

**Address:** 2200 Northwestern Ave., Racine, WI 53404

**Phone:** (877) 418-4782 **Fax:** (262) 636-9760

**24 HR. Emergency Telephone Number CHEMTREC (North America) :** 800-424-9300

**24 HR. Emergency Telephone Number CHEMTREC (International) :** +1 (703) 527-3887

### Section 2: Hazard(s) Identification

#### 2.1. GHS Classification:

| Health                                                                        | Environmental                                  | Physical       |
|-------------------------------------------------------------------------------|------------------------------------------------|----------------|
| Skin corrosion – Category 1B – H314<br>Serious eye damage – Category 1 – H318 | Very toxic to aquatic life – Category 1 – H400 | Not Applicable |

#### 2.2. GHS Label:

OSHA HCS 2012



**DANGER**



| <i>Hazard Statements</i>                                                             | <i>Precautionary Statements</i>                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| H314: Skin corrosion<br>H318: Serious eye damage<br>H400: Very toxic to aquatic life | P273: Avoid release to the environment.<br>P280: Wear protective gloves / eye protection / face protection / protective clothing.<br>P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P310: Immediately call a POISON CENTER or doctor/physician. |

Refer to Section 15.2 for full text of EU Classifications and R/S Phrases.

### Section 3: Composition/Information on Ingredients

| Chemical Components | CAS #     | EINECS    | Weight % |
|---------------------|-----------|-----------|----------|
| Sodium Hypochlorite | 7681-52-9 | 231-668-3 | 6.0%     |
| Sodium Hydroxide    | 1310-73-2 | 215-185-5 | <0.5%    |
| Surfactant Blend    | N/A       | unlisted  | <1%      |

### Section 4: First-Aid Measures

#### 4.1. Description of first aid measures

**Eye Contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

**Skin Contact:** Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 4.2. Most important symptoms and effects, both acute and delayed



**Symptoms/Injuries:** Harmful if swallowed. If over-exposed to solution, there will be constant irritation of the eye, nose, throat, and skin. Causes eye and skin burns.

**4.3. Indication of immediate medical attention and special treatment needed**

Immediately call a Poison Control Center or doctor/physician.

## Section 5: Fire-Fighting Measures

**5.1. Suitable Extinguishing Media:**

Use extinguishing media most appropriate for the surrounding fire.

**5.2. Fire Fighting Procedures:**

General: Evacuate all personnel; use full protective equipment for fire-fighting. Use a NIOSH approved, self-contained breathing apparatus when the product is involved in fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Substance is noncombustible. Oxidizer. Greatly increases the burning rate of combustible materials.

**5.3. Unusual Fire and Explosion Hazards:**

Nonflammable solution. Product does not ignite when exposed to open flame. Contact with metals may evolve flammable hydrogen gas.

**5.4. Combustion Products:**

Releases chlorine when heated above 35°C.

## Section 6: Accidental Release Measures

**6.1. Personal Precautions, Protective Equipment, and Emergency Procedures**

Wear proper personal protective equipment as indicated in Section 8. Wear respiratory protection and avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Follow instructions listed in Section 6.3 to follow clean up procedures.



## 6.2. Environmental Precautions

Follow all government regulations for waste disposal. Prevent release to the environment if possible. Do not flush waste or product into sewer or drains that may lead to waterways. Prevent further leakage or spillage if safe to do so. Discharge into the environment must be avoided.

## 6.3. Methods and Materials for Containment and Cleaning Up

**Small Spills:** Wipe up small amounts with chemical resistant or with an absorbent damp rag which is washed with large amounts of water after each use. After cleaning, flush away traces with water.

**Large Spills:** Soak up with inert absorbent material that is non-combustible and dispose of hazardous waste. Do not flush with water and keep the hazardous waste in a suitable, closed container for later disposal.

# Section 7: Handling and Storage

## 7.1. Handling

For intraoral use only by trained and experienced dental professionals. Follow good hygiene practices. Do not smoke, eat or drink while using. Use suitable protective equipment when handling. Wash thoroughly after handling and avoid any chemical contact with eyes, skin, and clothing. Keep container tightly closed to avoid inhalation or accidental ingestion. Use with adequate ventilation when necessary.

## 7.2. Storage

Store in a tightly closed container. The recommended storage temperature is 4°C (39°F) and store away from incompatible substances (e.g. acids). Keep containers upright when not in use. Shelf life is 30 months from date of manufacture, provided that it is stored properly.

# Section 8: Exposure Controls/Personal Protection

## 8.1. Exposure Limits / Engineering Controls

| Chemical Components | ACGIH – TLV*        | NIOSH – REL*        | OSHA – Final PELs*  |
|---------------------|---------------------|---------------------|---------------------|
| Sodium hypochlorite | 0.5 ppm**           | 0.5 ppm**           | 1 ppm**             |
| Sodium Hydroxide    | 2 mg/m <sup>3</sup> | 2 mg/m <sup>3</sup> | 2 mg/m <sup>3</sup> |



\* **TLV – Threshold Limit Value** (should not be exceeded at any time) / **REL – Recommended Exposure Limit** (should not be exceeded at any time) / **PEL – Permissible Exposure Limit** (averaged over an 8-hour workshift)

\*\* No exposure limits are established for Sodium Hypochlorite, as Chlorine (Cl<sub>2</sub>) are listed instead

**Engineering Controls:** General or local exhaust ventilation should be sufficient to control airborne levels. Emergency shower and eyewash should be nearby while handling the product.

## 8.2. Personal Protective Equipment (PPE) Information

**Eye Protection:** Use proper protection – wear tightly fitted chemical goggles (minimum face shield 8-inch minimum), full-face shield, or a full-face respirator at all time when product is handled. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Contact lenses should not be worn; they may contribute to severe eye injury.

**Skin Protection:** S36/37: Wear suitable protective clothing and gloves. 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.

**Clothing Protection:** Wear gloves and protective clothing (lab coat, apron, boots, and bodysuits) to prevent skin exposure. Protective equipment can be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory Protection:** None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator suitable for chlorine could be worn if PEL, REL, or TLV is exceeded. This respirator can also be used if inadequate ventilation is observed. 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).



## Section 9: Physical and Chemical Properties

### 9.1. Appearance / Color

**Physical State:** Liquid

**Appearance:** Clear, yellow solution

**Odor:** Chlorine

**Odor Threshold:** Not applicable

### 9.2. Important health, safety and environmental information

**Flashpoint:** Not applicable

**Autoignition Temperature:** Not applicable

**Boiling Point:** Approximately 100°C / 212°F

**Melting Point:** Not determined

**Freezing Point:** Not determined

**Vapor Pressure, mm Hg:** 17.5 at 20°C

**Relative Density:** Not determined

**Vapor Density (Air=1):** 2.57

**Solubility in Water:** Soluble

**Decomposition Temperature:** Not determined

**Pour Point:** Not applicable

**Lower Flammability Limit:** Not applicable

**Upper Flammability Limit:** Not applicable

**Specific Gravity:** ~1.1 at 70°F

**Evaporation Rate (Water=1):** Not applicable

**Viscosity:** Not determined

**Octanol/Water Partition Coefficient:** Not determined

**pH:** 12-13

**Molecular Weight:** Mixture

## Section 10: Stability and Reactivity

**Chemical Stability:** Light sensitive. Sodium hypochlorite solutions decompose slowly at room temperatures and can release low concentrations of corrosive chlorine gas. Decomposition is influenced by temperature, concentration, pH, ionic strength, exposure to light, and the presence of metals.

**Hazardous Polymerization:** Will not occur.



**Hazardous Decomposition Products:** Hydrogen chloride gas and sodium oxides can be formed under fire conditions.

**Incompatible Materials:** Strong acids, Ammonia, Amines, powdered metals, oxidizing agents, organic materials, and methanol. Keep away from combustible material.

**Conditions to Avoid:** Direct exposure to sunlight. Incompatible materials. Contact with acids liberates toxic gas. Heat and sources of ignition.

## Section 11: Toxicological Information

### 11.1. Signs and Symptoms of Overexposure

**Eye Contact:** Causes eye irritation and burns.

**Skin Contact:** May be harmful if absorbed through skin. Causes skin burns and irritation.

**Inhalation:** May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

**Ingestion:** May be harmful if swallowed.

**Extra Information:** Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Possible side effects include having spasms, inflammation, edema of the larynx, edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, and nausea.

### 11.2. Additional Toxicity Information

**Target Organ(s):** Respiratory system, eyes, and skin.

**RTECS#:**

**CAS#** 7681-52-9: NH3486300

**LD50/LC50:**

**CAS#** 7681-52-9:

Draize test, rabbit, eye: 10 mg Moderate;

Draize test, rabbit, eye: 1.31 mg Mild;

Oral, mouse: LD50 = 5800 mg/kg;





**Carcinogenicity:**

CAS# 7681-52-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information available.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Mutagenicity:** Mutation in microorganisms: Salmonella Bacteria = 1mg/plate DNA Repair: E. coli= 20 µg/disc DNA Damage: E. coli = 420 µmol/L Cytogenetic analysis: Human Lymphocyte = 100 ppm/24H

**Neurotoxicity:** No information available.

## Section 12: Ecological Information

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

## Section 13: Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

To minimize exposure, refer to section 8 (exposure controls/personal protection).

## Section 14: Transport Information

**14.1. U.S. Department of Transportation (DOT)** (N/A = Not applicable)

**Proper Shipping Name:** Corrosive, Liquid, Basic, Inorganic, N.O.S. (Sodium Hypochlorite Mixture)

**Identification (UN) Number:** 3266

**Hazard Class:** 8

**Packing Group:** III

**Marine Pollutant:** Not Determined

**Poison Hazard:** No







#### 14.2. Other Transportation Information

**By SEA (IMDG):**

**Proper Shipping Name:** Corrosive, Liquid, Basic, Inorganic, N.O.S. (Sodium Hypochlorite Mixture)

**Identification (UN) Number:** 3266

**Hazard Class:** 8

**Packing Group:** III **EMS-No:** F-A, S-B

**Marine Pollutant:** Not Determined

**By GROUND – Canada (TDG):**

**Proper Shipping Name:** Corrosive, Liquid, Basic, Inorganic, N.O.S. (Sodium Hypochlorite Mixture)

**Identification (UN) Number:** 3266

**Hazard Class:** 8

**Packing Group:** III

**By AIR (IATA):**

**Proper Shipping Name:** Corrosive, Liquid, Basic, Inorganic, N.O.S. (Sodium Hypochlorite Mixture)

**Identification (UN) Number:** 3266

**Hazard Class:** 8

**Packing Group:** III

### Section 15: Regulatory Information

#### 15.1. U.S. Federal Regulations

**OSHA Hazards**

Corrosive.

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**



Acute Health Hazard

#### **Massachusetts Right To Know Components**

Sodium hypochlorite CAS-No. 7681-52-9

Sodium Hydroxide CAS-No. 1310-73-2

#### **Pennsylvania Right To Know Components**

Sodium hypochlorite CAS-No. 7681-52-9

Sodium Hydroxide CAS-No. 1310-73-2

#### **New Jersey Right To Know Components**

Water CAS-No. 7732-18-5

Sodium hypochlorite CAS-No. 7681-52-9

Sodium Hydroxide CAS-No. 1310-73-2

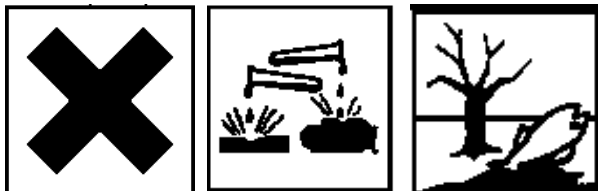
#### **California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### **15.2. European/International Regulations**

##### **European Labeling in Accordance with EC Directives**

**Hazard Symbol(s) and Classification:** “Xi” – Irritant, “C” – Corrosive, “N” – Dangerous for the environment.



**EU Risk (R) and Safety (S) Phrases:**

R22: Harmful if swallowed.

R31: Contact with acids liberates toxic gas.



R34: Causes burns.  
 R36/37/38: Irritating to eyes, respiratory system, and skin.  
 R41: Risk of serious damage to eyes.  
 R50: Very toxic to aquatic organisms.  
 S36/37: Wear suitable protective clothing and gloves.

**WHMIS (Canada):** Class E: Corrosive Liquid



## Section 16: Other Information

**National Fire Protection Association (NFPA) Ratings (estimated):** This information is intended solely for the use of individuals trained in the NFPA system.

**Health: 2**

**Flammability: 0**

**Reactivity: 1**

**Disclaimer:** The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. The information relates only to the specific material designated and does not relate to its use in combination with other materials or its use as to any particular process. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Inter-Med Inc. / Vista Dental Products be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Inter-Med Inc. / Vista Dental Products has been advised of the possibility of such damages.

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