

**Section 1 – Identification**

<b>Product Name:</b>	MARK3 6% Sodium Hypochlorite	<b>Manufacturer:</b>	Cargus International, Inc. 135 North Route 9W Congers, New York 10920
<b>Active Ingredient:</b>	Ethylenediaminetetraacetate	<b>Information Contacts:</b>	(845) 267-2600 <b>Toll Free:</b> (888) 732-2913 <b>Emergency Phone Numbers:</b> US & Canada: (845) 267-2600
<b>Family:</b> Endo Irrigation Solutions			
<b>Product Use:</b> Debridement and irrigation solution for root canals			
<b>Product #:</b> Various			

**Section 2 – Hazards Identification**

**Health:**  
Skin Irritant – Category 1B – H314 – Causes skin corrosion  
Eye Irritant – Category 1 – H318 – Causes severe eye damage

**Environmental:**  
Very toxic to aquatic life – Category 1 – H400

**Physical:**  
Not Applicable

**Label Elements:**  
**GHS Label Elements:**  
The product is classified and labeled according to the Globally Harmonized System (GHS), OSHA HCS 2012  
**Hazard Pictograms:**



**Section 3 – Composition/Information on Ingredients**

Chemical Identity	CAS Numbers	EINECS#	%
Sodium Hypochlorite	7681-52-9	231-668-3	3.0 – 6.0

**Section 4 – First Aid Measures**

Routes of Exposure	First Aid Instructions
Eye	Immediately flush with water for 15 minutes, holding the eyelids apart. Get medical help if discomfort persists.
Skin	Wash thoroughly with soap and water. Remove contaminated clothing. Get medical help if discomfort persists.
Ingestion	Do not induce vomiting. Rinse mouth with water. Drink large quantity of water. Consult a physician.

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

**Section 5 – Fire Fighting Measures**

Extinguishing Media:	Carbon dioxide, dry chemical foam, alcohol-resistant foam, water.
Fire Fighting Instructions:	Exposed firefighters must wear NIOSH-approved positive pressure, self-contained breathing apparatus with full-face mask and full protective clothing.
Unusual Hazards:	Not flammable or explosive. Product does not ignite when exposed to open flame.
Combustion Products:	May produce hydrogen chloride gas and/or chlorine gas and/or sodium oxides.

**Section 6 – Accidental Release Measures**

Personal Precautions, Protective Equipment and Emergency Procedures:	Remove people from danger area. Keep away from ignition sources. Wear protective clothing, eye protection, gloves and respiratory protective device. Avoid contact with eyes and skin.
Environmental Precautions:	Do not allow product to reach sewage system or any water course. Do not allow to penetrate the ground. Report releases as required by local and national authorities.
Methods and Materials for Containment and Clean-up:	Ensure adequate ventilation. Collect using an inert non-combustible absorbent material and place in appropriate containers for disposal.

**Section 7 – Handling and Storage**

Precautions for Safe Handling:	Ensure good ventilation/exhaustion at the workplace. Avoid contact with the eyes and skin. Avoid breathing vapors. Use suitable protective equipment when handling. Use in accordance with package instructions.
Conditions for Safe Storage:	Store in a cool, well ventilated area. Avoid excessive heat. Do not store together with incompatible substances (e.g. acids). Keep containers upright when not in use.

**Section 8 – Exposure Controls / Personal Protection**

**Occupational Exposure Limits:**

Sodium Hypochlorite	ACGIH – TLV: 0.5 ppm NIOSH – REL: 0.5 ppm OSHA – Final PELs – 1 ppm
---------------------	---

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).

**Personal Protective Equipment:**

General Measures:	To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.133), or European Standard EN166 be conducted before using this product.
Eye/ Face Protection:	Safety glasses / goggles or splash shields are required when handling. Ensure eye bath is on hand.
Skin Protection:	Use impermeable clothing to prevent ANY contact with this product, such as gloves, apron, boots, or whole body suit.

## Safety Data

## MARK3 Sodium Hypochlorite

Respiratory Protection:	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN149. Always use a NIOSH or European Standard EN149 approved respirator when necessary.
Thermal Hazards:	Not Applicable

### Section 9 – Physical and Chemical Properties

Appearance	Odor & Odor Threshold	Relative Density	Viscosity	% Volatile
Clear, Yellow Liquid	Chlorine	N/DA	N/DA	N/A

  

Boiling Point/ Freezing Point (°F/°C)	Decomposition Temperature	Vapor Density	Evaporation Rate	Ignition	Solubility In Water (20°C)
100/212	N/DA	N/DA	N/DA	N/A	Soluble

  

Flash Point (°F/°C)	Flammable Limit (vol%)	Auto-ignition Temperature (vol%)	Explosion Limits
N/A	N/A	N/A	N/A

### Section 10 – Stability and Reactivity

<b>Chemical Stability:</b> Stable at ambient temperature	<b>Incompatible Materials:</b> Strong acids, Ammonia, methanol.
<b>Hazardous Polymerization:</b> None known	<b>Hazardous Decomposition Products:</b> Hydrogen chloride gas and sodium oxides can be formed under fire conditions.
<b>Conditions to Avoid:</b> Direct exposure to sunlight. Heat and sources of ignition.	

### Section 11 – Toxicological Information

**Primary irritant effect:**

**Skin Contact:** Causes skin burns.

**Eye Contact:** Causes eye burns.

**Inhalation:** May cause respiratory tract irritation. Material is destructive to the tissue of the mucous membranes and respiratory tract.

**Additional toxicological information:**

**Target Organ(s):** Respiratory system.

**Chronic Effects:** If over-exposed to solution, there will be constant irritation to eyes, nose, and throat.

**Carcinogenicity:**

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**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**

<b>Regulations:</b>	Dispose in accordance with local and national environmental regulations.
<b>Properties (Physical/Chemical) Affecting Disposal:</b>	None known.
<b>Waste Treatment Recommendations:</b>	None needed for normal anticipated use.

**Section 14 – Transport Information**

<b>UN Number:</b> 3266	
<b>UN proper shipping name:</b> Corrosive, Liquid, Basic, Inorganic, N.O.S. (Sodium Hypochlorite Mixture)	
<b>Hazard Class:</b> 8	<b>U.S. DPT Labeling Requirements:</b> N/A
<b>Packing Group:</b> II	

**Section 15 – Regulatory Information**

**US Federal Regulations**

**OSHA Hazards:** Corrosive

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

**SARA 303 Components:** This material does not contain any chemical components with known CAS numbers that exceed the threshold reporting level established by SARA III, Section 313.

**SARA 311/312 Hazards:** Acute Health Hazard

**Massachusetts Right to Know Components:** Sodium Hypochlorite – CAS No. 7681-52-9

**Pennsylvania Right to Know Components:**

Water – CAS No. 7732-18-5  
Sodium Hypochlorite – CAS No. 7681-52-9

**New Jersey Right to Know Components:**

Water – CAS No. 7732-18-5  
Sodium Hypochlorite – CAS No. 7681-52-9

**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.

**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 organism
- S36/37 – Wear suitable protective clothing and gloves

**WHMIS (Canada):**



**Section 16 – Other Information**

**Hazard Rating System (Pictograms)**

<p><b>NFPA:</b></p> <div style="display: flex; align-items: center; justify-content: center;"> <div style="margin-right: 20px;"> <p><b>Health</b> →</p> </div> <div style="margin-left: 20px;"> <p>← <b>Flammability</b></p> <p>← <b>Reactivity</b></p> </div> </div>	<p><b>HMIS:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 30px;">2</td> <td style="background-color: #4a86e8; color: white; padding: 5px;"><b>Health</b></td> </tr> <tr> <td style="text-align: center;">0</td> <td style="background-color: #e53935; color: white; padding: 5px;"><b>Flammability</b></td> </tr> <tr> <td style="text-align: center;">1</td> <td style="background-color: #f1c40f; color: black; padding: 5px;"><b>Reactivity</b></td> </tr> <tr> <td style="height: 30px;"></td> <td></td> </tr> </table>	2	<b>Health</b>	0	<b>Flammability</b>	1	<b>Reactivity</b>		
2	<b>Health</b>								
0	<b>Flammability</b>								
1	<b>Reactivity</b>								

<b>Abbreviations and acronyms:</b>	
<b>GHS:</b>	Globally Harmonized System of Classification and Labeling of Chemicals
<b>HCS:</b>	Hazard Communication Standard (USA)

<b>SDS:</b>	Safety Data Sheet
<b>ECHA:</b>	European Chemicals Agency
<b>OSHA:</b>	Occupational Safety and Health Administration
<b>ADR:</b>	European Agreement concerning the International Carriage of Dangerous Goods by Road
<b>IMDG:</b>	International Maritime Code for Dangerous Goods
<b>DOT:</b>	US Department of Transportation
<b>IATA:</b>	International Air Transport Association
<b>ACGIH:</b>	American Conference of Governmental Industrial Hygienists
<b>CAS:</b>	Chemical Abstracts Service (division of the American Chemical Society)
<b>NFPA:</b>	National Fire Protection Association
<b>HMIS:</b>	Hazardous Materials Identification System
<b>VOC:</b>	Volatile Organic Compounds
<b>LC50:</b>	Lethal Concentration, 50%
<b>LD50:</b>	Lethal Dose, 50%
<b>PBT:</b>	Persistent, Bioaccumulative and Toxic
<b>vPvB:</b>	very Persistent and very Bioaccumulative
<b>Xi:</b>	Irritant
<b>T:</b>	Toxic
<b>F:</b>	Highly Flammable

<b>Date Sources:</b>
<b>OSHA</b> – <a href="http://www.osha.gov/dts/chemicalssampling/toc/chmcas.html">www.osha.gov/dts/chemicalssampling/toc/chmcas.html</a>
<b>TOXNET</b> – <a href="http://www.toxnet.nlm.nih.gov">www.toxnet.nlm.nih.gov</a>
<b>ECHA</b> – <a href="http://www.echa.europa.eu">www.echa.europa.eu</a>
<b>EnviChem</b> – <a href="http://www.echemportal.org">www.echemportal.org</a>

Prepared By:	Gavin Gabai
Revision History:	05/23/2019 Revision A

The information presented herein was obtained from sources considered to be reliable. However, this information is provided without any warranty, expressed or implied, regarding its correctness or suitability for consumers intended use and/or application. For this and other reasons, we assume no responsibility and expressly disclaim liability for loss, damage or expense arising out of any way connected with the handling, storage, use or disposal of the product. This SDS was prepared expressly for this product. Use the materials only as directed. If the product is used as a component of another product, the information contained within the SDS may not be applicable.

Cargus International, Inc. components are provided on an as is basis without warranties of any kind either expressed or implied. Cargus does not warrant the use or the results of use of the materials sold on an as is basis since they are intended for remanufacturing or repackaging. It is the sole responsibility of the user to examine and determine appropriate application and regulatory requirements associated with said Cargus components.