

# CFI Chem Fresh, Inc.

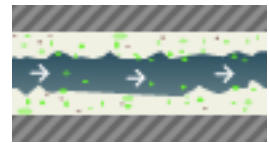
## OXCIDE™

Supplying *Oxide™* for Food Facility Water

Pure HOCl Oxidizer	Low Sodium
Neutral pH	Non Toxic
Non Caustic	Tasteless (at 650mV ORP)
No hydroxyl ions	Odorless (at 650mV ORP)

*Oxide™* is a water treatment for all of your facility water. It is a mild non-toxic, non-hazardous chemical that is added to the main water supply on a proportional injection ratio. Conditioning the water by *Oxide™* oxidizes the water and neutralizes the carbonates and bicarbonates and softens the water. Harmful deposits such as hard scale of Calcium, Magnesium, Silica, etc. are unable to form their crystalline structures or trap organic materials, and easily wash away leaving surfaces clean.

*Oxide™* is a unique chemical with powerful oxidative properties at a neutral pH. Derived from salt and proprietary electrochemical treatment process it creates pure HOCl (hypochlorous acid), which is the active ingredient of chlorination treatments. In this special formulation the sodium is rejected and total dissolved solids are removed, thereby producing very unique chemical properties.



Before



After



Before



After

Normal scale forms a hard, insoluble and interlocking network of vitreous scale, which plugs plumbing, traps organic materials, interferes with heat transfer and damages equipment.

*Oxide™* changes the chemical structure of scale, and dissolves Calcium and Magnesium salts. It alters the morphology of these crystals to small, evenly shaped rounded grains that form an unconsolidated powdery compound that won't adhere to metallic or PVC surfaces and is easily washed away.

### Applications

Facility Water	Misting
Water Distribution System	Spray Systems
Ice Machines	Hydro Cooler
Ice Injector	Hydro Vac
Flume lines	Cooling Towers
Wash Tanks	Well Water
Irrigation Systems	

### Facility Types

Poultry	Canning
Fresh Cut Processors	Dairy
Packing Houses	Green Houses
Frozen Foods	Hatcheries
Beverage	Fisheries
Juice	Meat Processing
Processed Foods	Plants

## *Oxide™ Summary*

### Oxide™ Features

- Mildly oxidizes and conditions water
- Prevents and removes mineral deposits of Magnesium and Calcium Carbonates
- Prevents, exposes and removes organics and other deposits

### Oxide™ Benefits

- Prevention of scale and hard mineral deposits
- Prevention and removal of organics
- Improves sanitation process
- Reduces labor
- Improves chemical function in water
- Reduces chemical usage
- Improves heat exchange and energy efficiency
- Improves equipment performance
- Reduces equipment maintenance

### Oxide™ Advantages

- Non Toxic
- Non hazardous
- Low Sodium
- Neutral pH
- Liquid form
- Easy to manage and apply based on flow or ORP
- Saves money and time

### Oxide™ Characteristics

- Hypochlorous Acid (pH 6.8)
- Chlorine derivative
- Low Sodium
- No hydroxyls
- Very low total dissolved solids
- Low ionic strength

# OXCIDE™ Treatment at Food Process Facilities



Entire facility water distribution treatment resulted in descaling of pipes, ice machines, cooling towers, floors, heat exchange surfaces, removed organics and removed deposits on other facility equipment.

Facility treatment over 60 days resulted in regular progression of descaling, and increasing ORP values throughout the facility. Descaling was apparent in all areas that resulted in direct cost reduction, chemical usage, maintenance labor, and improved efficiency and food safety.



Typical injection system treats water proportional to flow in the main water line.



Before treatment, scale deposits formed on the floors and surrounding area.



After 60 days of treatment, the area floors were clean and slight remaining scale was soft and powdery.



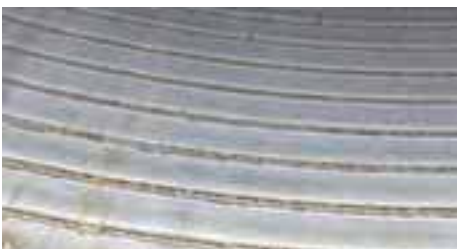
Initial hard deposits on plate ice machine forms within a few days, has to be cleaned with acid.



30 days after treatment, scale was partially removed and dissolved away with normal use.



60 days after treatment, scale was entirely removed and no new scale was formed.



Initial hard deposits on rotary ice machine forms within a few days.



30 days after treatment, scale was partially removed with normal use.



60 days treatment, scale was entirely removed and no new scale formed.

# OXCIDETM Treatment of Pasteurizer / Cooler

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Pasteurizer/Cooler water treatment resulted in soft water, descaling of cooling tunnel surfaces, inside panels and conveyer surfaces where water came in contact.

Descaling resulted in reduction of organic deposits, maintenance labor, improved efficiency, and food safety.



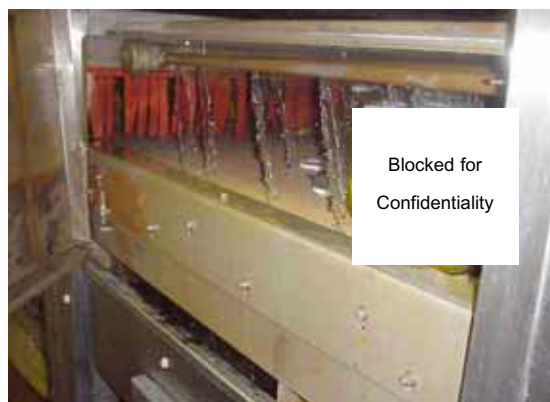
Initial mineral scale is hard and deposits on the panel of the pasteurizer.  
Picture shown before Oxcide treatment.



After 7 days of treatment, the panel was clean.



Untreated water forms hard scale deposits on the wall of the pasteurizer.  
Picture shown before Oxcide treatment.



After 7 days of treatment, scale was removed.

**MATERIAL SAFETY DATA SHEET**

**OXCID<sup>+</sup>™**

**SECTION I - PRODUCT IDENTIFICATION**

PRODUCT NAME: **OXCID<sup>+</sup>™**  
 PRODUCT DESCRIPTION: Scale Control.

**SECTION II - HAZARDOUS INGREDIENTS**

INGREDIENT NAME(S)	WEIGHT (%)	OCCUPATIONAL EXPOSURE LIMITS
	TLV OR PEL	ORAL LD-50
N.A.	-	-

Carcinogenic: **OSHA** = no **NTP** = no **IARC** = no

**SECTION III - PHYSICAL DATA**

COLOR: Clear Liquid.  
 PHYSICAL FORM: Liquid.  
 NON-VOLATILE (weight): 0.05%  
 ODOR: Slight Chlorine.  
 BOILING RANGE: >212°F (>100°C)  
 pH: 6.5 – 7.5  
 MELTING RANGE: N.E.  
 VAPOR DENSITY: N.E.  
 VAPOR PRESSURE: Same as water.  
 DENSITY: 8.5 lb/gal (1.20-1.26 kg/l)

**SECTION IV - FIRE AND EXPLOSION DATA**

HMS FLAMMABILITY RATING: 0  
 FLASH POINT: >212°F (100°C)  
 FLAMMABLE LIMITS:  
 LEL: N.A.  
 UEL: N.A.  
 EXTINGUISHING MEDIA: Water, carbon dioxide or other dry chemical fire fighting agents.  
 UNUSUAL FIRE AND EXPLOSION HAZARDS:  
 Product is non-flammable.  
 SPECIAL FIRE FIGHTING PROCEDURES: None.

**SECTION V - HEALTH HAZARD DATA**

EMERGENCY AND FIRST AID PROCEDURES:

Eye Contact: Non-Irritating.

Skin Contact: Non-Irritating.

Inhalation: Remove to fresh air.

MEDICAL CONDITIONS PRONE TO

AGGRAVATION BY EXPOSURE: None known.

PRIMARY ROUTES OF ENTRY:

Inhalation, dermal, eye.

HEALTH HAZARDS (acute and chronic) / EFFECTS OF OVEREXPOSURE:

- Contact of eye tissues with liquid may cause slight irritation.
- Inhalation of high vapor concentrations may cause shortness of breath, irritation of mucous membranes.
- Ingestion of this material is expected to cause gastrointestinal irritation.

**SECTION VI - REACTIVITY DATA**

STABILITY: Stable.

HAZARDOUS POLYMERIZATION:

Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:

Oxides of carbon, nitrogen and sulfur.

INCOMPATIBILITY: Strong oxidizing agents.

CONDITIONS TO AVOID: Strong oxidizers.

**SECTION VII - SPILL OR LEAK PROCEDURES**

STEPS TO BE TAKEN IN CASE MATERIAL IS

RELEASED OR SPILLED: Remove to drain.

WASTE DISPOSAL: Non-hazardous waste.

Dispose of in accordance with existing federal, state and local environmental regulations.

**SECTION VIII - SAFE HANDLING AND USE INFORMATION**

RESPIRATORY PROTECTION: Not required.

PROTECTIVE GLOVES: Not required.

EYE PROTECTION: Safety goggles.

OTHER PROTECTIVE EQUIPMENT: None.

**SECTION IX - SPECIAL PRECAUTIONS AND STORAGE DATA**

PRECAUTIONS TO BE TAKEN IN HANDLING:

Avoid extensive inhalation of product vapors.

PRECAUTIONS TO BE TAKEN IN STORING:

Keep containers tightly closed.

**SECTION X - SHIPPING DATA**

T.S.C.A. STATUS: Listed.

U.N. / N.A. NUMBER: N.A.

DOT/IMDG/IATA SHIPPING NAME: N.A.

DOT/IMDG/IATA HAZARD CLASS: N.A.

DOT/IMDG/IATA REQUIRED LABELS: N.A.

TECHNICAL SHIPPING NAME: N.A.

FREIGHT CLASS BULK: N.A.

LTL: 55.

TL: 35.

MW: 40.

DATE PREPARED: 06/14/2002

SUPERSEDES: 12/14/2001

**DISCLAIMER:** This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of the Chem Fresh, Inc. The data on this sheet relates only to the specific material designated herein. Chem Fresh, Inc. assumes no legal responsibility for use or reliance upon this data.

N.E. = NOT ESTABLISHED

N.A. = NOT APPLICABLE



Compliant to ANSINSE 60

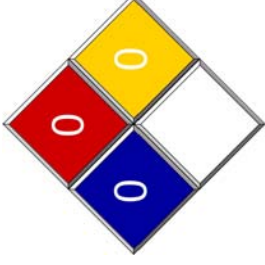
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**OMRI™**  
**L i s t e d**  
Organic Materials  
Review Institute



# Oxcide+™

Deposition Control

0.05% Sodium Hypochlorite as Hypochlorous Acid at pH 7.0

Chemical Content	%
Hazardous	0%
Inert / Non Hazardous Hypochlorous Acid	0.02% - 0.08%
Inert / Non Hazardous Deionized Water	99.92% - 99.98%

## STATEMENT OF PRACTICAL TREATMENT

**IF IN EYES:** Rinse with water.

**IF ON SKIN:** Rinse with water.

**IF SWALLOWED:** Drink water.

**IF INHALED:** Remove to fresh air.

## For Use in Domestic Water:

For the treatment of domestic water do not exceed 4 ppm available chlorine

## For Use in Food Plants:

For the treatment of food processing water do not exceed 4 ppm available chlorine

For the treatment of poultry chiller/poultry carcass wash water do not exceed 4 ppm available chlorine

For the treatment of red meat carcass washing do not exceed 20 ppm available chlorine followed by a potable water rinse

Emergency Phone  
CHEMTREC (800) 424-9300



### OMRI Approved

The Organic Materials Review Institute (OMRI) is a national nonprofit organization that determines which input products are allowed for use in organic production and processing. OMRI Listed or approved products may be used on operations that are certified organic under the USDA National Organic Program.



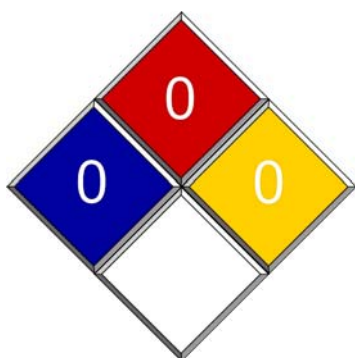
### NSF 60 Approved

NSF International, The Public Health and Safety Company™, a not-for-profit, non-governmental organization, is the world leader in standards development, product certification, education, and risk-management for public health and safety. NSF/ANSI Standard 60: Drinking Water Treatment Chemicals -- Health Effects is the nationally recognized health effects standard for chemicals which are used to treat drinking water.



### Kosher Approved

The insignia of the Star-K Kosher is a symbol of expertise and integrity in providing kosher supervision. The Star-K has been the leader in the field of reliable Kosher for nearly 40 years. It has made reliable Kosher available in a range of products spanning the gamut of human needs and has made these products accessible around the world.



### The NFPA Diamond

The NFPA diamond is designed to give general hazard information for chemicals.

Blue: Health Hazard, 0 - No Hazard

Red: Fire Hazard, 0 - Will not burn

Yellow: Reactivity Hazard, 0 - Stable

White: Special Hazard, None