



# Optima NCL

Liquid Alkaline Circulation Cleaner

## DESCRIPTION:

**OPTIMA NCL** is a concentrated high alkaline cleaner. Formulated with superior chelating and wetting agents, **OPTIMA NCL** is a non-foaming food surface cleaner that removes protein and starch soils.

**OPTIMA NCL** was formulated for CIP and COP applications in dairies, meat and poultry, bottling and other food industries.

## SPECIAL INFORMATION:

**OPTIMA NCL** is a Canadian Food Inspection Agency (CFIA) approved product for use in registered food processing plants. Surfaces in direct food contact must be rinsed with potable water.

**OPTIMA NCL** is also BC Kosher approved.

## DIRECTIONS FOR USE:

**OPTIMA NCL** is 3-5 times the concentration of an average alkaline cleaner.

Use at 1-50 mL per litre of water (0.13-6.4 oz/gal.) (1:1000 – 1:20), depending on the cleaning application.

Contact your Maxim Representative for specific product metering.

## PHYSICAL DATA

Appearance	Clear liquid
Color	Light brown
Foam	Low foam
Odor	Mild, indistinct
pH	Strong alkali

# MATERIAL SAFETY DATA SHEET

## SECTION 1 – PRODUCT/MANUFACTURER'S IDENTITY

Product Name: **OPTIMA NCL**

WHMIS CODE: E

### HMIS

Product Use: *Non-foaming CIP cleaner.*

Proper Shipping Name: POTASSIUM HYDROXIDE, SOLUTION

Hazard Class: Class 8, P.G. II

UN Number: UN 1814

3	Health
0	Flammability
0	Reactivity
C	Personal

A=Goggles, B=Goggles & Gloves  
C=Goggles, Gloves and Apron

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### EMERGENCY PHONE

Canada: Canutec 613-996-6666  
U.S.A.: Chemtrec 800-424-9300

ABBREVIATION KEY: N/A=Not Applicable, N/E=Not Established, N/D=Not Determined, > =Greater Than

## SECTION 2 – HAZARDOUS INGREDIENTS INFORMATION

INGREDIENT	CAS NO.	RANGE %	PEL	TLV
<b>POTASSIUM HYDROXIDE</b>	1310-58-3	20.0-30.0	N/A	2 mg/m3
LD50 (oral rat) 607 mg/kg				
LD50 (dermal) N/A				
LC50 N/A				

## SECTION 3 – PHYSICAL DATA

<b>Color and Odor:</b> Clear tan, mild odor.	<b>Boiling Point:</b> N/D	<b>Vapor Pressure (mm HG):</b> N/D	<b>pH:</b> 13.0-14.0@ 3.1% solution
<b>Physical State:</b> Liquid.	<b>Melting Point:</b> N/A	<b>Vapor Density:</b> N/D	<b>Specific Gravity:</b> 1.236 @ 20°C
<b>Coef. Water/Oil Dist:</b> Greater than 1.0	<b>Evaporation Rate:</b> N/D	<b>Solubility in Water:</b> Soluble	<b>Odor Threshold:</b> No Data

## SECTION 4 – FIRE AND EXPLOSION HAZARD DATA

**Flash Point and Method:** None to 100°C (TCC)      **Sensitivity to Mechanical Impact:** None.      **Extinguishing Media:** Not flammable.

**Flammable Limits:** None known.      **Sensitivity to Static Discharge:** None.      **Auto ignition Temperature:** None known.

**Conditions of Flammability:** None.

**Unusual Fire and Explosion Hazards:** Flammable hydrogen gas may liberate upon prolonged sensitive metals (i.e. aluminum, zinc, etc.) in confined areas.

**Hazardous Combustion Products:** Decomposition may produce oxides of carbon and other unidentifiable organic compounds.

**Special Fire Fighting:** Wear full protective equipment, including a NIOSH/MSHA approved, self-contained breathing apparatus for fire fighting situations. Use water spray to cool all nearby fire exposed surfaces.

## SECTION 5 – REACTIVITY DATA

**Chemical Stability:** Stable under normal storage conditions.      **Hazardous Polymerization:** Will not Occur.

**Incompatibility (material to avoid):** Strong acids.

**Hazardous Decomposition Products:** Decomposition may produce oxides of carbon and other unidentifiable organic compounds.

## SECTION 6 – TOXICOLOGICAL DATA

**Exposure Limits:** See Section 2 under Hazardous Ingredient.      **Routes of Entry:** Skin, eyes, inhalation.

**Irritancy of Product:** Corrosive to skin, eyes and respiratory system.      **Carcinogenicity:** None known.

**Sensitization:** None known.      **Mutagenicity:** None known.

**Name of Toxicological Synergistic Product:** None known.      **Reproductive Toxicity:** None known.

**Teratogenicity:** None known.

**Effects of Chronic Exposure:** Prolonged or repeated exposure may cause skin damage, or dermatitis, respiratory disorder or lung damage.

**Effects of Acute Exposure:** Product exposure can cause severe burns or damage to skin and eyes. Inhalation of vapor or mist causes respiratory discomfort such as breathing difficulties, burning, coughing, etc. Use only with adequate ventilation.

Ingestion will cause gastrointestinal discomfort and abdominal burns.

## SECTION 7 – PREVENTATIVE AND CONTROL MEASURES

**Respiratory Protection:** If handling of concentrated product, mist or spray is likely, use a NIOSH/MSHA approved dust/mist respirator.

**Ventilation:** Good general ventilation or local exhaust ventilation for spraying and misting in confined areas.

**Protective Gloves:** Butyl rubber, nitrile, or neoprene gloves.

**Eye Protection:** Chemical goggles, safety goggles or glasses.

**Protective Clothing and Equipment:** Long sleeve coveralls. Eye wash recommended in the immediate work area.

**Storage and Handling Procedures:** Use good industrial hygiene. Do not get in eyes. Avoid contact with skin and clothing. Avoid breathing sprays or mists. Store in a cool, dry place away from incompatibles. Keep container closed when not in use. Do not mix with any other chemicals. Store at temperatures below 30°C (86°F) and keep from freezing.

**Disposal Procedures for Spills or Leaks:** Wear protective equipment. Dike and contain large spills. Pump spills into an approved waste container. For small spills, soak up with a suitable absorbent such as clay, soil or commercially available absorbents, and then dispose of into an approved waste container. Keep away from sewers and out of natural waters.

**Waste Disposal Method:** Reuse if possible, or otherwise dispose recovered material in accordance with all local, Provincial or Federal Regulations.

**Special Shipping Information:** Store at temperatures below 30°C (86°F) and keep from freezing.

## SECTION 8 – EMERGENCY FIRST AID PROCEDURES

**First Aid:**  
If swallowed, give plenty of clean water or milk to drink to dilute product. Do not induce vomiting. Call a Physician. In case of contact with eyes, flush with clean water for 15 minutes. Get medical attention. For contact with skin, wash with clean water and rinse well. If irritation occurs or persists, get medical attention.

## PREPARATION DATA

PREPARED BY: Technical Service / Regulatory Division

PHONE: 604-526-5655

LAST UPDATE: Dec. 24, 2014

THE INFORMATION PROVIDED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN OBTAINED FROM CURRENT SOURCES AND IS BELIEVED TO BE RELIABLE