

1. IDENTIFICATION OF USE PRODUCT AND COMPANY

PRODUCT NAME: CALF-DET
USE: Alkaline Chlorine Cleaning concentrate for CIP pipes and tanks

Manufacturer: **LIBERCHEM**
LIBERCHEM Inc
572 Avenue Orly, Dorval
Quebec, Canada
H9P 1E9
Tel: 514 631-7177

EMERGENCY CONTACT: Poison Control Center (Quebec): 1 (800) 663-5060
CANUTEC: (613) 996-6666

2. HAZARD(S) IDENTIFICATION

• Hazard Classification of the substance



GHS05 CORROSION

Hazard statement

Skin corrosion serious damage to eyes causes severe burns to the skin. Harmful if swallowed causes burns of the digestive system. May cause irritation of the nose, throat and lungs. Corrosive to metals.

Label elements



Sodium Hydroxide, Sodium hypochlorite, solution

• Caution Requirement

If medical advice is needed; have container or label available.

Keep out of reach of children

Read the label before use

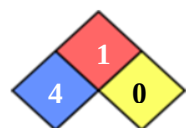
Avoid breathing spray mist.

Skin contact (hair): Remove contaminated clothing immediately, rinse with water in the shower

Eye Contact: Rinse cautiously with water for several minutes, Remove contact lenses if present and easy to remove, continue flushing

Remove the contents of the containers according to national regulations, international, regional and local.

Classification system: NFPA Rating – Scale (0-4)



Health=4
Inflammability = 1
Reactivity: 0

HMIS -Scale (0-4)

HEALTH	4
INFLAMMABILITY	1
PHYSICAL HAZARD	0

3. COMPOSITION

HAZARDOUS INGREDIENTS:

Chemical Characteristic: Mixtures

Description: Mixture of substances listed below with non-hazardous additions

1310-73-2	Hydroxide sodium	25 – 50 %
7681-52-9	Sodium Hypochlorite solution	1-5 %

4. FIRST AID

INHALATION: Remove victim to fresh air, if the victim is unconscious, place on the front side of the transported. Get medical attention.
SKIN: Rinse with water. Remove contaminated shoes and clothing. If irritation occurs and if it persists, seek medical attention.
EYES: Flush eyes with clean running water. If irritation occurs, seek medical attention.
INGESTION: Do not induce vomiting; do not mouth to an unconscious person. If conscious wash out bouche.et make it take much water. Consult a doctor immediately.

- Most important symptoms and effects, (acute and delayed): (Consult section 11) -No further relevant information available.
- Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5. FIRE-FIGHTING MEASURES

Code product: 104962

- MEANS OF EXTINCTION: Use appropriate means to extinguish the fire: Carbon dioxide (CO₂), chemical foam, sand or earth.
- FIRE EXTINCTIONS INAPPROPRIATE: Avoid direct contact with water can cause a violent exothermic reaction.
- SPECIFIC HAZARDS PRODUCT OR DANGEROUS MIX: No further relevant information available
- HAZARDOUS COMBUSTION: the decomposition products may include carbon monoxide.
- SPECIAL PROTECTION EQUIPMENT AND SPECIAL PRECAUTIONS FOR FIREFIGHTERS: Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

- PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY MEASURES: Wear protective equipment, remove away unprotected persons. Do not touch damaged containers persons or spilled products (Refer to section 8 for personal protection). and section 13 for data on disposal.
- METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING: Using non-combustible absorbent materials such as sand, vermiculite, universal absorbent, sawdust, Use with adequate ventilation. (Refer to section 13 for disposal of the product).

7. HANDLING AND STORAGE

- SAFETY PRECAUTIONS IN HANDLING: The workplace should be well ventilated to prevent vapor formation
- CONDITIONS SECURITY OF STORAGE AND INCOMPATIBLE MATERIALS: Avoid heat, acid products or products containing avoid mixing with acid or ammonia releases chlorine gas

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

- **General measures:** Keep away from food and beverages. Remove contaminated clothing immediately. Do not inhale gas fumes. Avoid contact with the skin.
- CONTROL PARAMETERS,

COMPONENTS WITH LIMIT VALUES FOR OCCUPATIONAL EXPOSURE	
1310-73-2	Hydroxide Sodium (10 – 30%)
PEL	Short-term value: 2 mg / m ³
REL	Ceiling: 2 mg / m ³
TLV	2 mg / m ³ TWA
7681-52-2	Hypochlorite de Sodium (1.0 – 5.0 %)
WEEL	Short-term value: 2 mg / m ³

ENGINEERING MEASURES SUITABLE: Ensure adequate ventilation, especially in confined areas. Use process enclosures, local exhaust ventilation, or other engineering controls to control the levels of suspended substances to below the exposure limits. Eyewash and emergency shower must be available at the workplace for handling this product.

PERSONAL PROTECTIVE EQUIPMENT

GLOVES: Impervious gloves



EYES: Safety goggles



RESPIRATORY: Respirator if needed



OTHER: Protective clothing



9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Light yellow liquid
ODOR	Chlorine
OLFACTIF ODOR	Not available
pH (20 °C- 68 °F)	12.0 – 13.0
MELTING POINT	Not available
BOILING POINT	100 °C
FLASH POINT	Not applicable
EVAPORATION RATE	Not available
FIRE (Solid, gaseous)	Not available
LOWER FLAMMABLE LIMITS	Not available
UPPER FLAMMABLE LIMITS	Not available
VAPOR TENSION (20 °C)	17 mm Hg
DENSITY (20 °C)	1.15 – 1.25
SOLUBILITY IN WATER	Complete
VAPOR DENSITY	Not available
COEFFICIENT (n-octanol/water)	Not available
DECOMPOSITION TEMPERATURE	Not available
VISCOSITY	Not available

10. STABILITY AND REACTIVITY

Code product: 104962

Page 2 sur 4

- REACTIVITY
- CHEMICAL STABILITY Stable under normal conditions.
- RISK DANGEROUS BRECTIONS No dangerous reactions know
- CONDITIONS TO AVOID No further relevant information's available
- INCOMPATIBLE MATERIALS Acids, oxidizing product, soft metal (Al,Zn,Sn), ammonia
- INCOMPATIBLE MATERIALS None knows hazardous decomposition products.

11. TOXICOLOGICAL INFORMATION

- INFORMATIONS ON TOXICOLOGICAL EFFECTS,

Acute toxicity:

1310-73-2	Sodium Hydroxide
Oral (LD50)	2000 mg.kg (rat)

HEALTH EFFECTS /
CHRONIC EXPOSURE

Causes burns to the respiratory tract, accompanied by a burning sensation in the nose and throat, coughing, wheezing, shortness of breath and Pulmonary edema. Symptoms of pulmonary edema can occur after exposure. A chronic skin contact at low concentration to cause dermatitis May be fatal if swallowed, inhaled or absorbed through skin. Corrosive. Target organs: respiratory tract, skin, eyes.

CANCEROGÉNÉCITY
MUTAGENICITY
TERATOGENICITY

No component of this product is identified as a probable carcinogen, possible or confirmed human by l'ARC.
not available Data
not available Data

12. ECOLOGICAL INFORMATION

TOXICITY The product is not classified as hazardous to the environment. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. Due to the pH of this product, we can expect it to produce significant Ecotoxicity upon exposure to aquatic organisms and aquatic systems
poison toxicity (peracetic acid): 76 mg/L 24 h

PERSISTENCE AND DEGRADABILITY Not Available

BIOACCUMULATIVE POTENTIAL This product is not considered bio accumulative

MOBILITY IN SOIL Not Available

13. DISPOSAL CONSIDERATIONS

Dispose of this material and its container at hazardous or special waste collection point. Do not allow this material to drain into sewers / pipes, water supply. Dispose in accordance with all applicable regulations

WASTE AND WASTE / UNUSED Dispose in accordance with all local, state and federal

14. TRANSPORT INFORMATION

UN NUMBER
TMD, DOT, IMDG, IATA
UN PROPER SHIPPING NAME

UN3266
CORROSIVE LIQUID, BASIC, INORGANIC N.O.S (Sodium Hydroxide)

TRANSPORT HAZARD
CLASS(ES)



Class: **8** corrosive Substances
Etiquette: **8**

Packaging group

II

ENVIRONMENTAL HAZARDS

Non

15.. REGULATORY INFORMATION

PRODUCT AS SOLD
WHMIS CLASSIFICATION B1D Toxic material E Corrosif

The components of this product are on the following inventories:

- **Canadian Domestic Substances List (DSL):** All components of this product are on the Domestic Substances List (DSL) Canada.
- **Inventory of US TSCA:** On TSCA inventory

16. OTHER INFORMATION

Date of issue 08/05/2025
Version 4.0
Prepared by Regulatory Affairs

We characterized the general risks of the product depending on the USE THAT WE RECOMMEND FOR THIS PRODUCT .

Any use not in accordance with our recommendations may affect the risk characterization.

This fact sheet provides information on health and safety. The product must be used in applications consistent with our product literature. Anyone using this product should be informed of the precautions of the product and should have access to this information. For all other uses, exposures should be evaluated in order to allow the appropriate handling practices and training program that will ensure safety in the workplace. For more information, please contact your local sales representative.

DISCLAIMER OF RESPONSABILITY: The above information is based on data considered accurate. No warranty, express or implied is based in relation to this data or information. User is responsible for determining whether the product is suitable for conditions of use.