

SAFETY DATA SHEET



Revision date: 03-Feb-2022

Revision Number 8

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name CONCEPT C15LF

Product Code(s) 00000000571

Other means of identification

Proper shipping name CAUSTIC ALKALI LIQUID, N.O.S. (CONTAINS SODIUM HYDROXIDE AND POTASSIUM HYDROXIDE)

UN number 1719

Recommended use of the chemical and restrictions on use

Recommended use Formulated alkaline detergent for CIP cleaning of dairy, food and beverage stainless steel plant surfaces.

Uses advised against No information available.

Supplier

Ixom Operations Pty Ltd
ABN: 51 600 546 512
Level 8, 1 Nicholson Street
Melbourne 3000
Australia

Telephone Number: +61 3 9906 3000

Emergency telephone number

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

GHS Classification

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

Corrosive to metals	Category 1
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3

SIGNAL WORD

Danger

Label elements

Corrosion
Exclamation mark



Hazard statements

H290 - May be corrosive to metals
H314 - Causes severe skin burns and eye damage
H335 - May cause respiratory irritation

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves / protective clothing / eye protection / face protection
Do not breathe fume, gas, mist, vapours, spray
Use only outdoors or in a well-ventilated area
Keep only in original packaging

Precautionary Statements - Response

Specific treatment (see First aid on this SDS)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
Wash contaminated clothing before reuse
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
Do NOT induce vomiting
Absorb spillage to prevent material damage

Precautionary Statements - Storage

Store in corrosive resistant container with a resistant inner liner
Store in a well-ventilated place. Keep container tightly closed
Store locked up

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other hazards which do not result in classification

Poisons Schedule (SUSMP) 6

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	CAS No.	Weight-%
Sodium hydroxide	1310-73-2	30-60%
Potassium hydroxide	1310-58-3	<10%
Non hazardous component(s)	-	to 100%

4. FIRST AID MEASURES

Description of first aid measures

General advice	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.
Emergency telephone number	
Inhalation	Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Seek immediate medical attention/advice.
Eye contact	In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Immediate medical attention is required.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. Immediately call a POISON CENTER or doctor/physician.
Ingestion	Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Get medical attention immediately if symptoms occur.

Most important symptoms and effects, both acute and delayed

Symptoms Irritation/Corrosion. May cause redness and tearing of the eyes.

Indication of any immediate medical attention and special treatment needed

Note to physicians Can cause corneal burns. Treat symptomatically.

5. FIRE FIGHTING MEASURES**Suitable Extinguishing Media**

Suitable Extinguishing Media Dry chemical, CO2, alcohol-resistant foam or water spray.

Unsuitable extinguishing media High volume water jet.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Non-combustible. Corrosive. Contact with metals may evolve flammable hydrogen gas.

Special protective actions for fire-fighters

Special protective equipment for fire-fighters Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Corrosive hazard. Wear protective gloves/clothing and eye/face protection.

Hazchem code 2R

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal precautions Avoid contact with skin, eyes and inhalation of vapors. Ensure adequate ventilation. Stop leak if you can do it without risk. Evacuate personnel to safe areas. Do not touch or walk through spilled material. Do not use steel or aluminum tools or equipment.

For emergency responders Clear area of all unprotected personnel. Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take up with sand or other non-combustible absorbent material and place into containers for later disposal. Avoid breathing dust or spray mist. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes, and clothing. Avoid breathing vapors or mists. Ensure adequate ventilation. Use personal protection equipment. Wash thoroughly after handling. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store away from incompatible materials described in Section 10. Store away from foodstuffs. Keep container tightly closed in a dry and well-ventilated place.

This material is a Scheduled Poison and must be stored, maintained and used in accordance with the relevant regulations.

Incompatible materials Ammonium salts. Acids. Aluminium. Tin. Zinc.

Poisons Schedule (SUSMP) 6

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Potassium hydroxide: Peak Limitation = 2 mg/m³

Sodium hydroxide: Peak Limitation = 2 mg/m³

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

Peak Limitation - a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls**Engineering controls**

Ensure ventilation is adequate to maintain air concentrations below Workplace Exposure Standards. Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.

**Eye/face protection**

Tight sealing safety goggles. Face protection shield.

Skin and body protection

Chemical resistant apron. Rubber boots.

Hand protection

Elbow-length impervious gloves.

Respiratory protection

If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Environmental exposure controls

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	Liquid
Appearance	No information available.
Color	No information available.
Odor	No information available.
Odor threshold	No information available.

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	13.4 (1% w/v)	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	4 °C	None known
Boiling point / boiling range	No data available	None known
Flash point	Not Applicable	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	Not Applicable	
Lower flammability or explosive	Not Applicable	

limits		
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	1.45 @ 20°C	None known
Water solubility	Miscible in water	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	Not Applicable	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information**10. STABILITY AND REACTIVITY**Reactivity

Reactivity Corrosive to aluminium, tin, and zinc, liberating flammable hydrogen gas.

Chemical stability

Stability Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions Reacts readily with various reducing sugars (i.e. fructose, galactose, maltose, dry whey solids) to produce carbon monoxide. Take precautions including monitoring the tank atmosphere for carbon monoxide to ensure safety of personnel before vessel entry.

Conditions to avoid

Conditions to avoid Do not contaminate food or feed stuffs.

Incompatible materials

Incompatible materials Ammonium salts. Acids. Aluminium. Tin. Zinc.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

11. TOXICOLOGICAL INFORMATIONAcute toxicityInformation on likely routes of exposure

Product Information No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:

Inhalation Inhalation may cause severe respiratory irritation and pulmonary edema.

Eye contact	Corrosive to the eyes and may cause severe damage including blindness.
Skin contact	Contact causes severe skin irritation and possible burns. Causes severe burns.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Can burn mouth, throat, and stomach.
Symptoms	Irritation/Corrosion. May cause redness and tearing of the eyes.

Numerical measures of toxicity - Product Information

Refer to component information below.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium hydroxide	-	= 1350 mg/kg (Rabbit)	-
Potassium hydroxide	= 284 mg/kg (Rat)	-	-

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Causes severe burns. Classification is based on mixture calculation methods based on component data.
Serious eye damage/eye irritation	Causes serious eye damage. Classification is based on mixture calculation methods based on component data.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	May cause respiratory irritation. Classification is based on mixture calculation methods based on component data.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.
Chronic effects:	No information available for the product.

12. ECOLOGICAL INFORMATION**Ecotoxicity****Ecotoxicity** Avoid contaminating waterways.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium hydroxide	-	LC50: =45.4mg/L (96h, <i>Oncorhynchus mykiss</i>)	-	-
Potassium hydroxide	-	LC50: =80mg/L (96h, <i>Gambusia affinis</i>)	-	-

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation No information available.

Component Information

Chemical name	Partition coefficient
Potassium hydroxide	0.65
	0.83

Mobility

Mobility in soil No information available.

Other adverse effects**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

14. TRANSPORT INFORMATION**ADG**

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

UN number 1719
Proper shipping name CAUSTIC ALKALI LIQUID, N.O.S. (CONTAINS SODIUM HYDROXIDE AND POTASSIUM HYDROXIDE)
Hazard class 8
Packing group II
Hazchem code 2R

IATA

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN number 1719
UN proper shipping name CAUSTIC ALKALI LIQUID, N.O.S. (CONTAINS SODIUM HYDROXIDE AND POTASSIUM HYDROXIDE)
Transport hazard class(es) 8
Packing group II

IMDG

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN number 1719
UN proper shipping name CAUSTIC ALKALI LIQUID, N.O.S. (CONTAINS SODIUM HYDROXIDE AND POTASSIUM HYDROXIDE)
Transport hazard class(es) 8

Packing group	II
IMDG EMS Fire	F-A
IMDG EMS Spill	S-B
Marine pollutant	No

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Australia

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

Poisons Schedule (SUSMP) 6

International Inventories

AIIC

All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.

NZIoC

All the constituents of this material are listed on the New Zealand Inventory of Chemicals.

Legend:

AIIC - Australian Inventory of Industrial Chemicals

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. OTHER INFORMATION

Reason(s) For Issue: 5 Yearly Revised Primary SDS

Issuing Date: 03-Feb-2022

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

C Carcinogen

Key literature references and sources for data used to compile the SDS

EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australian Industrial Chemicals Introduction Scheme (AICIS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

Disclaimer

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

End of Safety Data Sheet