SAFETY DATA SHEET



Revision date: 09-Nov-2022

Revision Number 2

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

POTASSIUM HYDROXIDE 10% FG **Product Name**

000000053027 Product Code(s)

Other means of identification

UN number 1814

Recommended use of the chemical and restrictions on use

Recommended use Food additive.

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

SIGNAL WORD

Danger

Label elements

Corrosion



Hazard statements

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

Precautionary Statements - Prevention

Keep only in original container

Do not breathe fume, gas, mist, vapours, spray

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves / protective clothing / eye protection / face protection

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

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

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: Rinse mouth. DO NOT induce vomiting

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Absorb spillage to prevent material damage

Precautionary Statements - Storage

Store locked up

Store in corrosion resistant container with a resistant inner liner

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

May be harmful if swallowed

Poisons Schedule (SUSMP) 6

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	CAS No.	Weight-%
Potassium hydroxide	1310-58-3	ca. 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.

Inhalation Remove to fresh air. Call a physician if symptoms occur.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower. Immediately call a POISON CENTER or doctor/physician.

Ingestion Rinse mouth thoroughly with water. Do NOT induce vomiting. Drink 1 or 2 glasses of water.

Get immediate medical advice/attention.

Most important symptoms and effects, both acute and delayed

Symptoms Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness).

Burning.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically. Can cause corneal burns.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

Corrosive hazard. Wear protective gloves/clothing and eye/face protection. Contact with

metals may evolve flammable hydrogen gas.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

Hazchem code 2R

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautionsAvoid contact with skin, eyes and inhalation of vapors. Evacuate personnel to safe areas.

Ensure adequate ventilation. Stop leak if you can do it without risk. Do not touch or walk through spilled material. Use personal protective equipment as required. Wash thoroughly

after handling.

Environmental precautions

Environmental precautions Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning upSoak up with inert absorbent material. Pick up and transfer to properly labelled containers.

After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin and eyes. Do not breathe vapor or mist. Do not eat, drink or smoke

when using this product. Use personal protection equipment. Wash thoroughly after

handling.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from

foodstuffs. Do not store in aluminium or galvanised containers nor use die-cast zinc or aluminium bungs; steel bungs should be used. Keep container closed when not in use.

This material is a Scheduled Poison and must be stored, maintained and used in

accordance with the relevant regulations.

Incompatible materials Acids. Ammonium salts. Ethylene diamine tetraacetic acid. Metals.

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

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 that eyewash stations and safety showers are close to the workstation location.

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. If splashes are likely to occur:. Face protection shield.

Skin and body protection Rubber boots. Apron. Overalls.

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.

No information available. **Environmental exposure controls**

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid **Appearance** Clear

Color No information available.

Odor Odourless

Odor threshold No information available.

Property Values Remarks • Method

None known pН >12 pH (as aqueous solution) No data available None known Melting point / freezing point No data available None known Boiling point / boiling range >100°C None known Flash point Not applicable None known **Evaporation rate** No data available None known Flammability (solid, gas) No data available None known None known

Not applicable

Flammability Limit in Air

Upper flammability or explosive

limits

Lower flammability or explosive Not applicable

limits

Vapor pressure No data available None known Vapor density No data available None known Relative density 1.09 @15°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 No data available **Decomposition temperature** None known Kinematic viscosity No data available None known No data available **Dynamic viscosity** None known

Other information

10. STABILITY AND REACTIVITY

Reactivity

Reactivity Reacts violently with acids. Corrosive to metals.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions Contact with metals may evolve flammable hydrogen gas. 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 avoidDo not contaminate food or feed stuffs.

Incompatible materials

Incompatible materials Acids. Ammonium salts. Ethylene diamine tetraacetic acid. Metals.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information 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 May cause irritation.

Eye contact Corrosive to the eyes and may cause severe damage including blindness.

Skin contact Contact causes severe skin irritation and possible burns.

Ingestion Can burn mouth, throat, and stomach.

Symptoms Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness).

Burning.

Numerical measures of toxicity - Product Information

Refer to component information below.

Numerical measures of toxicity - Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
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 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 No information available.

STOT - repeated exposureNo information available.

Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Potassium hydroxide	-	LC50: =80mg/L (96h,	-	-
		Gambusia affinis)		

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 Dispose of in accordance with local regulations. Dispose of waste in accordance with

products environmental legislation.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

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 1814

Proper shipping name POTASSIUM HYDROXIDE SOLUTION

Hazard class 8
Packing group II
Hazchem code 2R

<u>IATA</u>

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 1814

UN proper shipping name POTASSIUM HYDROXIDE SOLUTION

Transport hazard class(es) 8
Packing group | |

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 1814

UN proper shipping name POTASSIUM HYDROXIDE SOLUTION

Transport hazard class(es)

Packing group

IMDG EMS Fire

IMDG EMS Spill

Marine pollutant

S-B

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

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Poisons Schedule (SUSMP)

International Inventories

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

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: 09-Nov-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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text 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 lxom representative or lxom 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