Safety Data Sheet

WASH-X

SECTION 1. IDENTIFICATION

Product Identifier	WASH-X
Other Means of Identification	L2212
Recommended Use	Machine Dishwasher Liquid.
Restrictions on Use	Industrial Use Only - Keep Away from Children.
Distributed by:	Russell Hendrix, 10808 120 Street, Edmonton, Alberta, T5H 3P7, Canada Russell
Supplier Identifier:	Russell Hendrix, 10808 120 Street, Edmonton, Alberta, T5H 3P7, Canada
Emergency Phone No.	CANUTEC, 613 966 - 6666, 24 Hours
	Alberta Poison Centre, (800) 332 - 1414, 24 Hours
SDS No.	0047

SECTION 2. HAZARD IDENTIFICATION

Classification

Acute toxicity (Oral) - Category 4; Skin corrosion - Category 1B; Serious eye damage - Category 1

Label Elements

Signal Word:
Danger

Hazard Statement(s):
Causes severe skin burns and eye damage.
Causes serious eye damage.
Harmful if swallowed.

Precautionary Statement(s):
Prevention:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dusts or mists.
Wash hands and skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.

Response:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
Immediately call a POISON CENTRE or doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash contaminated clothing before reuse.

Storage:
Store locked up.

Disposal:
Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Potassium hydroxide	1310-58-3	15-40		

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Immediately rinse skin with lukewarm, gently flowing water for at least 30 minutes. Immediately call a Poison Centre or doctor.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a Poison Centre or doctor.

Ingestion

Immediately call a Poison Centre or doctor. Do not induce vomiting. Rinse mouth with water. Drink large quantities of milk or water.

Most Important Symptoms and Effects, Acute and Delayed

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Immediate Medical Attention and Special Treatment

Medical Conditions Aggravated by Exposure

None known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Does not burn. Closed containers may rupture violently when heated releasing contents.
Very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides; extremely hazardous hydrogen cyanide.

Special Protective Equipment and Precautions for Fire-fighters

Use extreme caution. Evacuate area. Approach fire from upwind to avoid hazardous vapours or gases. Knock down vapours or gases with water fog or fine water spray.
Before entry, especially into confined areas, use an appropriate monitor to check for: toxic gases or vapours, sufficient oxygen.
If a fire occurs in the vicinity of the material, isolate materials not yet involved in the fire, and move containers from the fire area if this can be done without risk. If not possible, cool fire-exposed material with flooding quantities of water to absorb heat, keep containers cool and procted fire-exposed material. Cooling should continue until well after the fire is out.
Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Increase ventilation to area or move leaking container to a well-ventilated and secure area.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Small spills or leaks: neutralize with dilute acid. Flush spill area.
Large spills or leaks: dike spilled product to prevent runoff. Neutralize with dilute acid. Follow similar procedure for small spills or leaks.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Never add water to a corrosive. Always add corrosives slowly to COLD water.
Avoid breathing in this product. Avoid repeated or prolonged skin contact. Do not get in eyes. Do not swallow. Only use where there is adequate ventilation. Avoid release to the environment. Wear personal protective equipment to avoid direct contact with this chemical. Wash hands thoroughly after handling this material.

Conditions for Safe Storage

Store in an area that is: well-ventilated, separate from incompatible materials (see Section 10: Stability and Reactivity).
Comply with all applicable health and safety regulations, fire and building codes.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	**TWA**	**STEL**	**TWA**	**Ceiling**	**8-hr TWA**	**TWA**
Potassium hydroxide				2 mg/m3		

Appropriate Engineering Controls

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.
Butyl rubber, natural rubber, neoprene rubber, nitrile rubber, Viton®/butyl rubber.

Respiratory Protection

If exposure exceeds occupational exposure limits, use an appropriate NIOSH approved respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Red.
Odour	Odourless
Odour Threshold	Not available
pH	14
Melting Point/Freezing Point	Not applicable (melting); -5 ºC (23 ºF) (freezing)
Initial Boiling Point/Range	100 ºC (212 ºF)
Flash Point	Not available
Evaporation Rate	~ 0.3 (n-butyl acetate = 1)
Flammability (solid, gas)	Not applicable (liquid).
Upper/Lower Flammability or Explosive Limit	Not applicable (upper); Not applicable (lower)
Vapour Pressure	2.33 kPa (17.48 mm Hg) at 20 ºC
Vapour Density (air = 1)	~ 0.6
Relative Density (water = 1)	1.25
Solubility	Soluble in all proportions in water
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); ~ 1 centipoises (dynamic)

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

Reacts in the presence of aluminum and other metals. See “Hazardous Decomposition Products”.

Conditions to Avoid

Prolonged exposure to high temperatures.

Incompatible Materials

Strong acids (e.g. hydrochloric acid), strong oxidizing agents (e.g. perchloric acid).

Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide; extremely hazardous hydrogen cyanide; corrosive sodium oxide;

Very toxic carbon monoxide, carbon dioxide; extremely hazardous hydrogen cyanide; corrosive sodium oxide; potassium hydroxide fumes; flammable hydrogen gas.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Potassium hydroxide		273 mg/kg (rat)	

Skin Corrosion/Irritation

Animal tests show skin corrosion.

Serious Eye Damage/Irritation

Animal tests show serious eye damage.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May cause nose and throat irritation. Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest.

Skin Absorption

No information was located.

Ingestion

Harmful based on information for closely related materials. May cause severe irritation or burns to the mouth, throat and stomach. Symptoms may include nausea, vomiting, stomach cramps and diarrhea.

Aspiration Hazard

Not known to be an aspiration hazard.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Causes effects similar to STOT (Specific Target Organ Toxicity) - Single Exposure, as described above.

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer. Not known to be a skin sensitizer.

Carcinogenicity

Not known to cause cancer.

Reproductive Toxicity

Development of Offspring

Not known to harm the unborn child.

Sexual Function and Fertility

Not known to cause effects on sexual function or fertility.

Effects on or via Lactation

Not known to cause effects on or via lactation.

Germ Cell Mutagenicity

Not known to be a mutagen.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

This section is not required by OSHA HCS 2012. This section is not required by WHMIS 2015.

SECTION 14. TRANSPORT INFORMATION

This section is not required by WHMIS 2015. This section is not required by OSHA HCS 2012.

UN 1814 POTASSIUM HYDROXIDE SOLUTION CLASS 8, II

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

This section is not required by OSHA HCS 2012. This section is not required by WHMIS.

SECTION 16. OTHER INFORMATION

SDS Prepared By	Chemisphere Solutions Ltd
Phone No.	(780) 460-4670
Date of Preparation	May 16, 2018
Date of Last Revision	May 22, 2018
Key to Abbreviations	IARC = International Agency for Research on Cancer HSDB® = Hazardous Substances Data Bank OSHA = US Occupational Safety and Health Administration
References	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS).