SAFETY DATA SHEET

Potassium Chloride

SECTION 1: IDENTIFICATION

Product identifier used on a label:	**Potassium Chloride**
Product code:	5367
HS Code:	340290
Recommended use of the chemical and restrictions on use:	Metal finishing industry.
Chemical family:	Mixture.
Name, address and phone # of supplier:	Aqua Bond Inc. 440 Passmore Ave. Toronto, ON, M1V 5J8 (416) 754-7211
24 Hr. Emergency phone #	**CANUTEC (613) 996-6666**

SECTION 2: HAZARDS IDENTIFICATION

Classification of the chemical:	This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).
Hazard classification:	EYE DAMAGE/IRRITATION: CATEGORY 2B – Causes eye irritation.
Label elements:	No pictogram according to the established criteria.
Signal word:	Warning
Hazard statements:	H320: Causes eye irritation.
Precautionary statements:	P264: Wash hands thoroughly after handling. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical advice/attention.
Other hazards:	Not available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/ mixture: Mixture

Ingredient name	**CAS Number**	**Concentration (wt. %)**
Potassium Chloride	7447-40-7	96-99.8%
Sodium Chloride	7647-14-5	0.2-4%

SECTION 4: FIRST-AID MEASURES

Description of first aid measures:

Ingestion	DO NOT induce vomiting, rinse mouth. Administer water if patient is conscious. Get medical attention if a large amount is swallowed. Get medical attention if you feel unwell.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if irritation develops or persists.
Skin contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention.

Eye contact	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention if pain and irritation develops or persists.

Most important symptoms and effects, both acute and delayed:
Irritation to eyes, skin and respiratory tract. Overexposure may be irritating to the respiratory system. May cause skin irritation. May cause eye irritation. If large quantity has been ingested: Abdominal pain; Diarrhea; Nausea; Vomiting; Tingling in hands and feet; Weak pulse; Circulatory disturbances.
Indication of any immediate medical attention and special treatment needed: Not available.
Protection of first-aiders: First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media:	
Suitable	Not flammable. Use extinguishing media appropriate for surrounding fire.
Unsuitable	None known.
Flash point:	Not Available.
Autoignition Temperature:	Not Available.
Special hazards arising from the substance:	
Hazardous thermal decomposition products:	Potassium oxides; hydrogen chloride; Chlorine gas.
Specific hazards:	Not available.
Special protective actions for fire-fighters:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. Wear chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots. Keep combustibles (wood, paper, oil, clothing, etc.) away from spilled material. Avoid dust formation. Remove all sources of ignition. Do not get water inside containers. Do not expose spill to water.
Environmental precautions:	Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

Methods and materials for containment and cleaning up:	Wear protective eyeware, gloves, and clothing. Refer to Section 8. Always obey local regulations. Containerize for disposal. Refer to Section 13. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Keep in suitable closed containers for disposal.
Special spill response procedures:	In case of transportation accident, contact CHEMTREC at 1-800-424-9300.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:	Put on appropriate personal protective equipment. Avoid exposure – obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container.
Conditions for safe storage:	Store in accordance with local regulations. Store in a segregated and approved area. Store protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials, food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be resealed and kept upright. Do not store in unlabeled containers.
Incompatible materials:	Water. Acids. Aluminum.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Exposure limits

Ingredient	**Exposure limits**
Potassium Chloride	Not available.
Sodium Chloride	Not available.

Engineering controls:	Ensure adequate ventilation, especially in confined areas.
Individual protection measures:	Eyes/face: Chemical splash goggles and face shield. Skin: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Respiratory: Wear appropriate respirator where spray mist occurs. Be sure to use a NIOSH approved dust and mist respirator or equivalent. Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Solid. 3-25 mm granules. White color.
Odor:	Not available.
Odor threshold:	Not available.
pH:	Not available.
Melting point:	771-773 °C (1420-1423 °F)
Freezing point:	Not applicable.
Initial boiling point and boiling range:	1420-1500 °C (2588-2732 °F) (sublimes)
Flash point:	Not available.
Evaporation rate:	Not applicable.
Flammability:	Not available.
Upper and lower flammability limits:	Not available.
Vapour pressure:	Not applicable.
Vapour density:	Not applicable.
Relative density:	2 g/cc
Solubility:	Water: 347 g/l (at 20 °C)
Partition coefficient n-octanol/water:	Not applicable.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Not applicable.

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	Stable at ambient temperature and under normal conditions of use
Chemical stability:	Stable at standard temperature and pressure.
Possibility of hazardous reactions:	Hazardous polymerization will not occur.
Conditions to avoid:	Exposure to moisture.
Incompatible materials:	Contact with acids liberates toxic gas (chlorine). Contact with hot nitric acid may produce toxic nitrosyl chloride.
Hazardous decomposition products:	Potassium oxides; hydrogen chloride; Chlorine gas.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicity data:	LD50 Rat Oral: 2600 mg/kg – Potassium chloride LD50 Rat Oral: 3 g/kg – Sodium chloride LD50 Rabbit Dermal: >10 g/kg – Sodium chloride LC50 Rat Inhalation: >42 g/m^3/1h – Sodium chloride
Information on the likely routes of exposure:	Skin and Eyes: yes Inhalation: yes Ingestion: yes
Potential health effects (acute):	Irritation to eyes, skin and respiratory tract. Overexposure may be irritating to the respiratory system. May cause skin irritation. May cause eye irritation. If large quantity has been ingested: Abdominal pain; Diarrhea; Nausea; Vomiting; Tingling in hands and feet; Weak pulse; Circulatory disturbances

Delayed and immediate effects, chronic effects from short and long term exposure:	None known.
Potential chronic health effects:	None known.
Carcinogenicity:	Not listed as a carcinogen.
Mutagenicity:	No known significant effects or critical hazards.
Teratogenicity:	No known significant effects or critical hazards.
Developmental effects:	No known significant effects or critical hazards.
Fertility effects:	No known significant effects or critical hazards.
Sensitization:	No known significant effects or critical hazards.
Toxicological effects:	No known significant effects or critical hazards.
Acute toxicity:	No known significant effects or critical hazards.
Irritation/corrosion:	Causes eye irritation.

Specific target organ toxicity single exposure: Not classified.
Specific target organ toxicity repeated exposure: Not classified.
Aspiration hazard: Not classified.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity (7447-40-7): Fish: Lepomis macrochirus (blue gill): 2010 mg/L/96 hr
Aquatic Invertebrates: EC50 Daphnia magma: 337-825 mg/L/48 hr
LC50 Physa heterostropha: 940 mg/L/96 hr
Aquatic Plants: TLM Nitzschia linearis diatom (algae): 1337 ppm/5 days/120 hr
EC50 Scendesmus subspicatus: 2500 mg/L/72 hr
NOEC Chlorella vulgaris: 600 mg/L/3-4 month
LOEL Chlorella vulgaris: 700 mg/L/3-4 month

Persistence and degradability: Not available.
Bioaccumulative potential: Not available.
Mobility in soil: Will likely be mobile in the environment due to water solubility.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

	TDG
UN Number:	Not regulated.
UN proper shipping name:	-
Transport hazard class:	-
Packing group:	-
Environmental hazard:	No data available.
Special precautions for user:	**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident.

SECTION 15: REGULATORY INFORMATION

United States	
Toxic Substances Control Act (TSCA)	All components are listed.
Superfund Amendments and Reauthorization Acts	Potassium Chloride – Section 311/312 Hazard Classes: Immediate (acute) health hazard
Canada	
Canadian Domestic Substances List (DSL):	All components are listed.

SECTION 16: OTHER INFORMATION

Revision date: December 06, 2019

UN = United Nations

Disclaimer

While the information and recommendations set forth are believed to be accurate as of data hereof, Aqua Bond Inc., makes no warranty with respect thereto and disclaims all liability from reliance thereon.