AQUABOND Chemistry for Tomorrow SAFETY DATA SHEET

Pickle-Guard™ HF

SECTION 1: IDENTIFICATION

Product identifier used on a label:	**Pickle-Guard HF**
Product code:	5013
Recommended use of the chemical and restrictions on use:	Industrial use.
Chemical family:	Mixture.
Name, address and phone # of supplier:	Aqua Bond Inc. PO Box 63635, Woodside Square Toronto, ON, M1V 5K2 (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:
ACUTE TOXICITY – ORAL: CATEGORY 3 – Toxic if swallowed.
SKIN CORROSION/IRRITATION: CATEGORY 1B – Causes severe skin burns and eye damage.
EYE DAMAGE/IRRITATION: CATEGORY 1 – Causes serious eye damage.
SPECIFIC TARGET ORGAN TOXICITY: CATEGORY 3 – May cause respiratory irritation.

Label elements:



Signal word: Danger

Hazard statements:
H301: Toxic if swallowed.
H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.

Precautionary statements:

Prevention
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.

Response
Ingestion:
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P330: Rinse mouth.
Skin:
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P363: Wash contaminated clothing before reuse.
P310: Immediately call a POISON CENTER or doctor/physician.
Inhalation:
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310: Immediately call a POISON CENTER or doctor/physician.
Eyes:
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor/physician.
Storage
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store Locked up.
Disposal
P501: Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

Other hazards: May form combustible dust concentrations in air. Causes severe digestive tract burns.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/ mixture: Mixture

Ingredient name	**CAS Number**	**Concentration (wt. %)**
Sodium Bisulphate	7681-38-1	80-90%
Sodium Bifluoride	1333-83-1	5-15%

SECTION 4: FIRST-AID MEASURES

Description of first aid measures:

Ingestion: DO NOT induce vomiting, rinse mouth. Administer water if patient is conscious. Immediately call a POISON CENTER or doctor/physician.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Immediately call a POISON CENTER or doctor/physician.

Skin contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Immediately call a POISON CENTER or doctor/physician.

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Immediately call a POISON CENTER or doctor/physician.

Most important symptoms and effects, both acute and delayed:
Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (corrosive, permeator). The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastrointestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Cough,wheezing, laryngitis, Shortness of breath, headache, nausea, spasm, inflammation and edema of the

larynx, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation.

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	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable	No data available.
Flash point:	Not Available.
Autoignition:	Not Available.
Temperature:	Not Available.
Special hazards arising from the substance:	
Hazardous thermal decomposition products:	Sulfur oxides, halogenated compounds, metal oxide/oxides.
Specific hazards:	Thermal decomposition can lead to release of irritating gases and vapours.
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.
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. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep.

	Vacuum dust with equipment fitted with HEPA filter and place in closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor.
Special spill response procedures:	In case of transportation accident, contact CANUTEC (613) 996-6666.

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. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not taste or swallow. Wash thoroughly after handling. Prevent dust accumulation.Containers that have been opened must be resealed and kept upright. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
Incompatible materials:	Oxidizing agents, alkalis, acids, metals and moisture.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Exposure limits

Ingredient	**Exposure limits**
1333-83-1	ACGIH Threshold Limit Value (TLV) TWA – 2.5 mg/m^3

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, white
Odor:	Odorless.
Odor threshold:	Not available.
pH:	Not applicable.
Melting point:	Not available.
Freezing point:	Not available.
Initial boiling point and boiling range:	Not available.
Flash point:	Not available.
Evaporation rate:	Not applicable.
Flammability:	Not applicable.
Upper and lower flammability limits:	Not applicable.
Vapour pressure:	Not available.
Vapour density:	Not available.
Relative density:	Not available.
Solubility (in water):	Soluble
VOC	2 g/L.
Partition coefficient n-octanol/water:	Not applicable.
Auto-ignition temperature:	Not applicable.
Decomposition temperature:	Not available.
Viscosity:	Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity and chemical stability:	Stable under recommended storage conditions
Possibility of hazardous reactions and conditions to avoid:	Under normal conditions of storage and use, hazardous reactions will not occur.
Incompatible materials:	Oxidizing agents, alkalis, acids, metals and moisture.
Hazardous decomposition products:	Sulfur oxides, fluorine compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicity data:	
7681-38-1	LD50 Rat Oral: >2800 mg/kg
Information on the likely routes of exposure:	Skin and Eyes: yes Inhalation: yes Ingestion: yes
Potential health effects (acute):	Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (corrosive, permeator). The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastrointestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by

	redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Cough, wheezing, laryngitis, Shortness of breath, headache, nausea, spasm, inflammation and edema of the larynx, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation.
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 severe skin burns and eye damage. Causes serious eye damage.

Specific target organ toxicity single exposure: Category 3 – May cause respiratory irritation.
Specific target organ toxicity repeated exposure: Not classified.
Aspiration hazard: Not available.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity:

7681-38-1	Fish:	Acute LC50 Moronesaxatilis - Larvae: 56 mg/L/96h/Fresh water Chronic NOECOncorhynchusmykiss - Egg: 205 mg/L/31d/Fresh water
	Algae:	Acute EC50 Naviculaseminulum: 1900 mg/L/96h/Fresh water Acute EC50 Pseudokirchneriellasubcapitata: 1430 mg/L/72h/Fresh water Chronic EC10 Pseudokirchneriellasubcapitata: 700 mg/L/72h/Fresh water
	Aquatic plants:	Acute IC50 Lemnaaequinoctialis: 332 mg/L/96h/Fresh water
	Crustaceans:	Acute LC50 Amphipoda: 1110 mg/L/48h/Fresh water
	Daphnia:	Acute LC50 Daphnia magna: 1194 mg/L/48h/Fresh water

Persistence and degradability: Not available.
Bioaccumulative potential: Not available.
Mobility in soil: Not available.

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:	UN2923
UN proper shipping name:	CORROSIVE SOLID, TOXIC, N.O.S.
Transport hazard class:	8 (N6.1)
Packing group:	III
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	Section 311/312: Immediate (acute) health hazard
Canada	All components are listed.
Canadian Domestic Substances List (DSL):	

SECTION 16: OTHER INFORMATION

Revision date: August 18, 2023

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.