SAFETY DATA SHEET

Sodium Bisulfite 38%

SECTION 1: IDENTIFICATION

Product identifier used on a label:	**Sodium Bisulfite 38%**
Product code:	5601
Recommended use of the chemical and restrictions on use:	Industrial applications.
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:
SKIN CORROSION/IRRITATION – Category 1B
EYE DAMAGE/IRRITATION – Category 1
CORROSIVE TO METALS – Category 1

Label elements:



Signal word: Danger

Hazard statements:
H290 – May be corrosive to metals
H314 - Causes severe skin burns and eye damage.

Precautionary statements:
P260 - Do not breathe mist, vapours, spray.
P264 – Wash exposed skin thoroughly after handling.
P280 - Wear eye protection, face protection, protective clothing, and protective gloves.
P234: Keep only in original container.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.
P304+P340: If inhaled: Remove person to fresh air and keep comfortable for breathing.
P303+P631+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with

	water/shower. P390: Absorb spillage to prevent material damage. P363 - Wash contaminated clothing before reuse. P406: Store in corrosive resistant container with a resistant inner liner. P405 - Store locked up. P501 - Dispose of contents/container to Comply with applicable regulations. If inhaled: Remove person to fresh air and keep comfortable for breathing.
Other hazards:	Other hazards which do not result in classification: Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/ mixture: Mixture

Ingredient name	**CAS Number**	**Concentration (%)**
Sodium Bisulphite	7631-90-5	38.0 – 39.0
Water	7732-18-5	61.0 – 62.0

SECTION 4: FIRST-AID MEASURES

Description of first aid measures:

Ingestion	Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Do not give activated charcoal. Do not give chemical antidote. Immediately call a POISON CENTER or doctor/physician. Call Poison Information Centre. Take the container/vomit to the doctor/hospital. Ingestion of large quantities: immediately to hospital. Rinse mouth. Do NOT induce vomiting.
Inhalation	Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that mists are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.
Skin contact	Wash immediately with lots of water (15 minutes). Do not apply (chemical) neutralizing agents. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
Eye contact	Get medical attention immediately. Call a poison center or physician.

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 30 minutes, keeping eyelids open. Chemical burns must be treated promptly by a physician.

Most important symptoms and effects, both acute and delayed:
Ingestion may cause severe burns to the mucous membranes of the digestive tract. Symptoms may include abdominal pain, vomiting, burns, perforations and bleeding. Causes serious eye damage. Symptoms may include severe pain, blurred vision, redness and corrosive damage. Chemical burns, corneal damage, and possibly blindness can result from direct contact. Causes skin burns. Symptoms may include redness, blistering, pain and swelling. Direct skin contact may cause corrosive skin burns, deep ulcerations and possibly permanent scarring. May cause irritation of the nose, throat, mucous membranes, and respiratory tract. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Indication of any immediate medical attention and special treatment needed:
Immediate medical attention is required. Causes chemical burns. Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media:	
Suitable	Carbon dioxide (CO2); Dry chemical; Alcohol resistant foam.
Unsuitable	Do not use a solid water stream as it may scatter and spread fire.
Special hazards arising from the substance or mixture / Conditions of flammability:	Burning may produce irritating, toxic and obnoxious fumes. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure. Contact with metals may release small amounts of flammable hydrogen gas.
Hazardous thermal decomposition products:	Sulfur oxides.
Special protective actions for fire-fighters:	Do not breathe mists, vapours or sprays. Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.
Special protective equipment for fire-fighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Chemical protective clothing (e.g. chemical splash suit) and positive pressure self-contained breathing apparatus (NIOSH approved or equivalent) may be necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Do not touch or walk through spilled material. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Refer to protective measures listed in sections 7 and 8.

Environmental precautions:	Do not allow material to contaminate ground water system. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply.
Methods and materials for containment and cleaning up:	Ventilate the area. Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand). Place in clean, dry and labelled containers. Refer to Section 13 for disposal of contaminated material. Contact the proper local authorities.
Special spill response procedures:	In case of transportation accident, contact CANUTEC (613) 996-6666. EPA/CERCLA Reportable quantity (RQ): Sodium bisulphite(5000 lbs / 2270 kg)

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:	Wear protective gloves/clothing and eye/face protection. Use only in well-ventilated areas. Keep away from extreme heat and flame. Do not breathe mists, vapours or sprays. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Keep only in original container. Keep away from incompatibles. Keep containers closed when not in use. Empty containers retain residue (liquid and/or vapour) and can be dangerous.
Conditions for safe storage:	Store in corrosive resistant container with a resistant inner liner. Store locked up. Store away from incompatible materials. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. No smoking. Inspect periodically for damage or leaks. Have appropriate fire extinguishers and spill clean-up equipment in or near storage area.
Incompatible materials:	Oxidizing agents; Metals (e.g. Aluminum, brass, copper);Alkalies ;mineral acids

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Exposure limits

Ingredient	**Exposure limits**
Sodium Bisulphite	**ACGIH TLV** TWA 5 mg/m^3

Ventilation and engineering controls:	Use only in well-ventilated areas. Use corrosion-resistant ventilation. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In case of insufficient ventilation wear suitable respiratory

	equipment.
Individual protection measures:	Eyes/face: Wear eye/face protection. Chemical splash goggles must be worn when handling this material. A full face shield may also be necessary. Skin: Wear protective gloves/clothing. Impervious gloves must be worn when using this product. The suitability for a specific workplace should be discussed with the producers of the protective gloves. Wear impervious clothing to prevent skin contact. Wear chemically protective gloves (impervious), boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Respiratory: If airbourne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134) or CSA Z94.4-02. Advice should be sought from respiratory protection specialists.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear to yellow liquid.
Odour:	Sulfur odour
Odour threshold:	Not available.
pH:	3.8-5.2
Melting / Freezing point:	6°C
Initial boiling point and boiling range:	104°C
Flash point:	Not applicable.
Evaporation rate:	Not available.
Flammability:	Not available.
Upper and lower flammability limits:	Not flammable.
Vapour pressure:	32 mmHg
Vapour density:	No data available.
Relative density:	1.33
Solubility:	Soluble.
Partition coefficient n-octanol/water:	Not available.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	Not normally reactive. Corrosive in contact with metals Contact with metals may release small amounts of flammable hydrogen gas.
Chemical stability:	Stable under normal conditions.

Possibility of hazardous reactions:	None expected, when used as intended. Hazardous polymerization does not occur.
Conditions to avoid:	Keep away from excessive heat, open flames, sparks and other possible sources of ignition. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.
Incompatible materials:	See Section 7 (Handling and Storage) for further details.
Hazardous decomposition products:	See Section 5 (Fire Fighting Measures).

SECTION 11: TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure:	SKIN AND EYES: yes INHALATION: yes INGESTION: yes SKIN ABSORPTION: yes
Potential health effects (acute):	EYE: Causes serious eye damage. Symptoms may include severe pain, blurred vision, redness and corrosive damage. Chemical burns, corneal damage, and possibly blindness can result from direct contact. SKIN: Causes skin burns. Symptoms may include redness, blistering, pain and swelling. Direct skin contact may cause corrosive skin burns, deep ulcerations and possibly permanent scarring. INGESTION: Ingestion may cause severe burns to the mucous membranes of the digestive tract. Symptoms may include abdominal pain, vomiting, burns, perforations and bleeding. INHALATION: Inhalation of mists or sprays may mildly irritate the upper respiratory tract and cause coughing or sneezing.
Potential chronic health effects:	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Carcinogenicity:	No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
Mutagenicity:	Not expected to be mutagenic in humans.
Reproductive effects & Teratogenicity:	Not expected to cause reproductive effects.
Specific target organ effects:	Target Organs: Eyes, skin, respiratory system and digestive system.
Fertility effects:	No known significant effects or critical hazards.
Sensitization:	Not expected to be a skin or respiratory sensitizer.
Medical conditions aggravated by overexposure:	Pre-existing skin, eye and respiratory disorders.
Synergistic materials:	No information available.
Toxicological effects:	There is no data available for this product. The calculated ATE values for this mixture are: ATE oral = 3736.85 mg/kg

	LC_{50} (4hr)	LD_{50}	
Chemical name	inh, rat	(Oral, rat)	Rabbit, dermal)
Sodium Bisulfite	Not available	1420 mg/kg	Not available

Other important toxicological hazards:

None reported by the manufacturer.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity: May be harmful to aquatic life. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. See the following tables for the substance's ecotoxicity data.

Ecotoxicity data:

Ingredients	CAS No	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
Sodium bisulphite	7631-90-5	240 mg/L (Mosquito fish)	Not available	Not available

Ingredients	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
Sodium bisulphite	7631-90-5	119 mg/L Water flea	Not available	Not available

Ingredients	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Sodium bisulphite	7631-90-5	Not available	Not available	Not available

Persistence and degradability: Biodegradation is not applicable to inorganic substances.

Bioaccumulation potential: No information available. See the following data for ingredient information.

Components	Partition coefficient n-octanol/water (log Kow)	Bioconcentration factor (BCF)
Sodium bisulphite (CAS 7631-90-5)	Not available	Not available

Mobility in soil: There is no data available for this product.

Other Adverse Environmental effects:

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: DISPOSAL CONSIDERATIONS

Handling for Disposal: Handle in accordance with good industrial hygiene and safety practice. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Refer to protective measures listed in sections 7 and 8.

Methods of Disposal: Dispose in accordance with all applicable federal, state,

provincial and local regulations.

RCRA — If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14: TRANSPORT INFORMATION

	TDG
UN Number:	UN2693
UN proper shipping name:	BISULFITES, AQUEOUS SOLUTION, N.O.S. (Sodium bisulphite)
Transport hazard class:	8
Packing group:	III
Environmental hazard:	This substance does not meet the criteria for an environmentally hazardous substance according to the IMDG Code. See ECOLOGICAL INFORMATION, Section 12.
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 or spillage.

SECTION 15: REGULATORY INFORMATION

Canada inventory (DSL): Listed.

SECTION 16: OTHER INFORMATION

Revision date: August 10, 2023

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

Disclaimer

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