SAFETY DATA SHEET

Sodium Metabisulfite 35% soln. FG

SECTION 1: IDENTIFICATION

Product identifier used on a label:	**Sodium Metabisulfite 35% soln. FG**
Product code:	5104
Synonyms:	Sodium Pyrosulfite, Disodium Pyrosulfite, Pyrosulfurous Acid, Disodium Salt, Sodium Disulphite.
Recommended use of the chemical and restrictions on use:	Food additive, preservative, antioxidant, sanitizer, cleaner, waste water treatment
Chemical family:	Mixture.
Name, address and phone # of supplier:	Aqua Bond Inc. PO Box 63635, 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:
SERIOUS EYE IRRITANT – Category 2A
ACUTE TOXICITY, Oral – Category 4
ACUTE TOXICITY, Dermal – Category 5

Label elements:



Signal word: Warning

Hazard statements:
H302 – Harmful if swallowed
H313 – May be harmful to skin
H319 – Causes serious eye irritation

Precautionary statements:
P264 – Wash exposed skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 - Wear eye protection, face protection, protective clothing, and protective gloves.
P281 – Wear protective equipment for hands, eyes, face and respiratory tract.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
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.

	P501 - Dispose of contents/container to Comply with applicable regulations. If inhaled: Remove person to fresh air and keep comfortable for breathing.
Other hazards:	Contact with acids or water liberates toxic sulfur dioxide gas.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/ mixture: Mixture

Ingredient name	**CAS Number**	**Concentration (%)**
Sodium Metabisulfite	7681-57-4	34.0 – 36.0
Water	7732-18-5	64.0 – 66.0

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:

May irritate the skin. May cause irritation and/or burns to the eyes. Harmful if swallowed or inhaled. May cause severe and possibly fatal allergic reactions if inhaled or swallowed by some asthmatics and other 'sulfite-sensitive' individuals. Reacts with acids to form toxic and irritating sulfur dioxide gas. Releases sulfur dioxide if heated above 150°C (302°F).

Indication of any immediate medical attention and special treatment needed:
Immediate medical attention is required for eye contact and allergic respiratory reaction. Treat symptomatically. Note potential for anaphylactic shock with allergic individuals.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media:	
Suitable	Dry Powder is recommended.
Unsuitable	Water.
Special hazards arising from the substance or mixture:	Releases toxic and irritating sulfur dioxide at fire temperatures. May release hazardous gas with fire or water.
Hazardous thermal decomposition products:	Releases toxic and irritating sulfur dioxide at fire temperatures.
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:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Do not release runoff from fire control methods to sewers or waterways.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Provide ventilation to clear sulfur dioxide fumes which may be generated by contact with water.
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:	Promptly sweep up material with minimum dusting and shovel into an empty container with a cover. Rinse spill area with plenty of water.
Special spill response procedures:	In case of transportation accident, contact CANUTEC (613) 996-6666.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
Conditions for safe storage:	Keep in a tightly closed container. Store in a cool, dry, ventilated area away from sources of heat, and moisture. Store in a cool, dry, well-ventilated area away from water, ice, acids, and oxidizing agents. Releases sulfur dioxide gas slowly

	at ambient temperatures.
Incompatible materials:	Keep away from heat and oxidizing agents. Releases toxic and irritating sulfur dioxide at fire temperatures. May release hazardous gas with fire.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Exposure limits

Ingredient	**Exposure limits**
Sodium Metabisulphite	**ACGIH TLV** TWA 5 mg/m^3
Ventilation and engineering controls:	Handle in accordance with good industrial hygiene and safety practices. Wash hands after handling the product and at the end of workday. Local exhaust if dusty conditions exist or if there is a release of sulfur dioxide gas. Do not use in unventilated spaces, e.g., walk-in coolers or confined spaces.
Individual protection measures:	Eyes/face: Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Maintain eye wash fountain and safety shower facilities in work area. Skin: For handling dry material, wear rubber gloves and full work clothing, including long-sleeved shirt and trousers. When handling solutions and there is prolonged or repeated contact, wear impervious gloves, clothing and boots. Respiratory: Where required, use a NIOSH-approved respirator for dust, mist and/or sulfur dioxide gas, as conditions indicate. Some exposures may require a NIOSH-approved self-contained breathing apparatus or supplied-air respirator. Equipment selection depends on contaminant type and concentration. Select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. Hygiene: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear colorless to pale yellow liquid.
Odour:	Pungent sulfur dioxide odor
Odour threshold:	Not available.
pH:	3.5-5.0
Melting / Freezing point:	Begins to rapidly decompose above 150°C (302°F)
Initial boiling point and boiling range:	Not available

Flash point:	Not applicable.
Evaporation rate:	Not available.
Flammability:	Not available.
Upper and lower flammability limits:	Not flammable.
Vapour pressure:	No data available.
Vapour density:	No data available.
Relative density:	1.3 (water =1.0)
Solubility:	Miscible with water.
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:	No data available.
Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	Reacts with acids to form toxic and irritating sulfur dioxide gas.
Conditions to avoid:	Avoid elevated temperatures. Temperatures above 150°C (302°F) cause the rapid evolution of toxic and corrosive sulfur dioxide gas.
Incompatible materials:	Oxidizers: may cause strong exothermic reactions. Acids, water and ice: releases sulfur dioxide gas which is toxic, corrosive, and potentially deadly. Water and/or ice speeds the production of sulfur dioxide gas.
Hazardous decomposition products:	Sulfur dioxide and sodium sulfide residue. Sodium sulfide is flammable, a dangerous fire risk, a strong irritant to skin and tissue, and is incompatible with acids.

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: Dust or mist may irritate or burn the eyes. Solutions will irritate or burn. Permanent eye injury is possible. SKIN: Repeated or prolonged contact with dust may cause irritation. Contact with solutions will cause skin irritation and possibly burns. INGESTION: May irritate the gastrointestinal tract. May cause severe or deadly allergic reactions in some asthmatics and sulfite sensitive individuals. Very large doses may cause violent colic, diarrhea, depression, and even death. INHALATION: Inhalation of dust or mist can irritate the

	respiratory tract. May cause severe or deadly allergic reactions in some asthmatics and sulfite sensitive individuals. Possible signs and symptoms of allergic reactions include bronchoconstriction, sweating, flushing, hives, rapid heart rate, decreased blood pressure, and anaphylaxis. Contact with acids, water and/or ice, releases sulfur dioxide gas which may be harmful or deadly if inhaled.
Potential chronic health effects:	No data available.
Carcinogenicity:	IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive effects & Teratogenicity:	No data available.
Specific target organ effects:	Target Organs: Eyes, skin, respiratory system and digestive system.
Fertility effects:	No data available.
Sensitization:	No data available.
Medical conditions aggravated by overexposure:	No data available.
Synergistic materials:	No data available.
Toxicological effects:	Immediate (Acute) Effects: Sodium metabisulfite – LD50 (oral, rat) = 1131 – 3200 mg/kg Delayed (Subchronic and Chronic) Effects: Sodium metabisulfite is not mutagenic in microbial systems or in rat bone marrow metaphase assay or dominant lethal test in rats. A 2 year feeding study in rats was negative for carcinogenicity. In a three generation feeding study in rats, no adverse effects on reproduction was observed.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity data for Sodium metabisulfite:

Daphnia EC50 48h - 89 mg/L
Fish LC50 96h - 32 mg/L
Algae EC50 72h - 48 mg/L

Persistence and degradability: Chemical Oxygen Demand (COD) 168 mg/g
Bioaccumulation potential: No data available.
Mobility in soil: No data available.
Results of PBT and vPvB assessment: No data available.
Other Adverse Environmental effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Methods of Disposal: 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.
Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.
Contaminated packaging: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

	TDG
UN Number:	UN2693
UN proper shipping name:	BISULFITES, AQUEOUS SOLUTION, N.O.S. (Sodium Metabisulphite)
Transport hazard class:	8
Packing group:	III
Environmental hazard:	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.
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: January 2, 2024
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

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