SAFETY DATA SHEET

Sodium Hydrosulphite

SECTION 1: IDENTIFICATION

Product identifier used on a label:	**Sodium Hydrosulphite**
Product code:	4027
Recommended use of the chemical and restrictions on use:	Industrial use only.
Chemical family:	Pure chemical.
Name, address and phone # of supplier:	Aqua Bond Inc. PO Box 63635, 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:
SELF-HEATING SUBSTANCES AND MIXTURES - CATEGORY 1
ACUTE TOXICITY - ORAL- CATEGORY 4
SERIOUS EYE DAMAGE / IRRITATION- CATEGORY 2

Label elements:



Signal word: DANGER

Hazard statements:
H251 Self-heating; may catch fire.
H302 Harmful if swallowed
H319 Causes serious eye irritation

Precautionary statements:
P210 Keep away from heat/sparks/open flames/hot surfaces and other ignition sources.
P233 Keep container tightly closed.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/ eye protection/ face protection.
P301+P312+P330 IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor if you feel unwell.
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 attention.
P407 Maintain air gap between stacks or pallets.
P410+P420 Protect from sunlight. Store separately.

	P501 Dispose of contents in accordance with local/regional/national/ international regulations.
Other hazards:	Not available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/ mixture: Pure substance

Ingredient name	**CAS Number**	**Concentration (%)**
Sodium hydrosulphite	7775-14-6	85-100

SECTION 4: FIRST-AID MEASURES

Description of first aid measures:

Ingestion	Do not induce vomiting. Immediately call a POISON CENTRE or doctor. Rinse mouth.
Inhalation	Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor if you feel unwell.
Skin contact	Rinse skin with lukewarm, gently flowing water / shower for 5 minutes or until product is removed. If skin irritation occurs or if you feel unwell: Get medical advice / attention.
Eye contact	Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 15 to 20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice / attention.

Most important symptoms and effects, both acute and delayed:

Ingestion	Harmful if swallowed.
Inhalation	May cause respiratory irritation.
Skin contact	Not available
Eye contact	Causes serious eye irritation.

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable	Extinguish fire using extinguishing agents suitable for the surrounding fire.
Unsuitable	Water jets are not recommended in fires involving chemicals.
Special hazards arising from the substance:	Self-heating; may catch fire. In the event of a fire oxides of sulphur may be released.
Hazardous thermal decomposition products:	Not known.
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 NIOSH-approved self-contained breathing apparatus and chemical-protective clothing.

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 vapours. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Environmental precautions:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for containment and cleaning up:	Contain spillage and then collect using electrically protected vacuum cleaner or by wet-brushing and place in container for disposal.
Special spill response procedures:	In case of transportation accident, contact CANUTEC (613)996-6666.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:	Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure. Inspect containers for damage or leaks before handling. If the original label is damaged or missing replace with a workplace label. Have suitable emergency equipment for fires, spills and leaks readily available. Never return contaminated material to its original container.
Conditions for safe storage:	Store in a cool, dry, well-ventilated area, out of direct sunlight, away from heat sources and incompatible materials. Maintain air gap between stacks or pallets. Store separately. Always store in original labeled container. Keep containers tightly closed when not in use and when empty. Empty containers may contain hazardous residues. Protect label and keep it visible.
Incompatible materials:	Acids, such as sulphuric, nitric, hydrochloric, phosphoric, flurosilicic (HFSA), sulphonic, acetic, citric, oxalic, and formic.Oxidizing agents, such as oxygen, hydrogen peroxide, sulphuric and nitric acids, hypochlorites and permanganates.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:
Exposure limits

Ingredient	*Exposure limits*
Sulphur dioxide	**ACGIH TLV** TWA 2 ppm STEL /Ceiling 5 ppm

Engineering controls: Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions should be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems. An eye wash bottle or eye wash station should be available, tested, and be in close proximity to the product being handled in accordance with provincial regulations.

Individual protection measures: Eyes/face: Where there is potential eye or face exposure, tightly fitting chemical goggles are recommended. Contact lenses are not recommended; they may contribute to severe eye injury.
Skin: Where handling this product it is recommended that skin contact is avoided.
Respiratory: In case of insufficient ventilation wear suitable respiratory equipment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White to yellow crystalline powder
Odour:	Sulphurous.
Odour threshold:	Not available.
pH:	Not available.
Melting/freezing point:	Decomposes at 52 °C
Initial boiling point and boiling range:	Decomposes at 52 °C
Flash point:	Not applicable
Evaporation rate:	Not available.
Flammability:	Non flammable
Upper and lower flammability limits:	Not available.
Vapour pressure:	Not available.
Vapour density:	Not available.
Relative density:	2.38 g/cm^3
Solubility:	241 g/L @ 20 °C in water
Partition coefficient n-octanol/water:	Not available.
Auto-ignition temperature:	140 °C
Decomposition temperature:	52 °C
Viscosity:	Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	Self-heating; may catch fire.
Chemical stability:	This product is stable if stored according to the

recommendations in Section 07.

Possibility of hazardous reactions: Hazardous polymerization is not known to occur.

Conditions to avoid: Incompatible materials.

Incompatible materials: Acids, such as sulphuric, nitric, hydrochloric, phosphoric, flurosilicic (HFSA), sulphonic, acetic, citric, oxalic, and formic. Oxidizing agents, such as oxygen, hydrogen peroxide, sulphuric and nitric acids, hypochlorites and permanganates.

Hazardous decomposition products: Thermal decomposition may produce oxides of sulphur.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure: SKIN AND EYES: yes
INHALATION: yes
INGESTION: yes

Potential health effects (acute): EYE: Causes serious eye irritation.
INHALATION: May cause respiratory irritation.
SKIN: Not available.
INGESTION: Harmful if swallowed.

Potential chronic health effects: No known significant effects or critical hazards.

Carcinogenicity: The components are not listed as carcinogens.

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.

Aspiration hazard: No known significant effects or critical hazards.

Toxicological effects:

Acute toxicity:

Product	Result	Species	Dose	Exposure
Sodium hydrosulphite	LD50 oral	Rat	2500 mg/kg	
	LD50 dermal	Rat	>2000 mg/kg	
	LD50 inhalation	Rat	>5.5 mg/L	4 hrs

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity

Product	Type	Species	Value	Exposure Time
Sodium hydrosulphite	LC50	Fish	62.3 mg/L	96 hours
	EC50	Aquatic invertebrates	98.3 mg/L	48 hours
	EC50	Algae	206.2 mg/L	72 hours

Persistence and degradability: The domestic substance list categorizes sodium hydrosulphite as persistent.

Bioaccumulative potential: The domestic substance list categorizes sodium hydrosulphite as non-bioaccumulative.

Mobility in soil: This product is water soluble, is not predicted to adsorb to soil and may contaminate ground water.

Other adverse effects: 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. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

	TDG
UN Number:	UN1384
UN proper shipping name:	SODIUM HYDROSULPHITE
Transport hazard class:	4.2
Packing group:	II
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: June 11, 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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