

MATERIAL SAFETY DATA SHEET

Revision #: 01

Section 1 - Product Identification & Use

Product Name: **Sodium Metabisulphite**
 Synonyms: Sodium Pyrosulphite, Sodium Disulphite, Disulphurous Acid.
 WHMIS Classification: D2A-Very Toxic materials, D2B-Toxic materials
 TDG Classification: Not regulated
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Section 2 - Hazardous Ingredients

Hazardous Component	%(w/w)	C.A.S. No.	LD ₅₀ & LC ₅₀
Sodium Metabisulphite	95-100	007681-57-4	oral (rat) 1540 mg/kg

Section 3 - Physical Data

Physical state: solid
 Specific Gravity (Water = 1): 1.4-1.5
 Boiling point: decomposes at 150°C
 Freezing point: no data
 pH 1% solution: 4.3-4.5 (1% Aqueous solution)
 Solubility in water (anhydrous): 36-45% (By weight) @ 20°C
 Vapour pressure: no data
 Evaporation rate: no data found
Odour & Appearance: White crystalline granules. May have slight sulphur dioxide odour.

Section 4 - Fire or Explosion Hazard

Flammability: The product is not considered to be flammable. Avoid accumulation and dispersion of dust to reduce explosion potential.
Extinguishing media: Carbon dioxide. Dry chemical. Do not use water. Avoid direct contact of this product with water as this can cause a violent exothermic reaction. Water in large quantity is the only effective extinguishing agent for decomposition reactions and fires. Sodium carbonate will not stop decomposition reactions. Burning or smoking material must be cooled with large quantities of water.
Hazardous Combustion/Decomposition Products: Thermal decomposition products are toxic and may include Sodium Sulphide, Sulphur Dioxide, and oxides of sulphur, sodium and irritating gases. Sodium sulphide residue is flammable, a dangerous fire risk, a strong irritant to skin and tissue and incompatible with acids.

Section 5 - Reactivity Data

Stability: Stable.
Incompatible substances: Strong oxidizers. Oxidizers may cause strong exothermic reaction. Strong bases. Lewis or mineral acids. Combustibles. Nitrates. Alcohols.
 Reactions with acids and oxidizing agents can release sulphur dioxide. Acids, water and ice yield sulphur dioxide gas, which is corrosive, toxic and potentially deadly. Water and/or ice increase the natural rate of yield of sulphur dioxide gas. Sulphur dioxide can be released if the product is used improperly in acidic or moist conditions. Sulphur dioxide is toxic and can cause death in extreme cases.
Polymerization: Will not occur.
Hazardous decomposition products: Thermal decomposition products are toxic and may include Sodium Sulphide, Sulphur Dioxide, and oxides of sulphur, sodium and irritating gases.

Section 6 - Toxicological Properties

Inhalation: Irritates nose, throat and respiratory tract. In the presence of moisture the dust dissolves to form a solution which may cause burns. If heated to the point where Sulphur Dioxide gas is driven off, then this gas is highly irritating to the respiratory tract. May cause respiratory sensitization or other allergic responses.
Skin contact: Skin contact can cause irritation, especially under the finger nails (and other confined spaces such as under rings or watch bands) . In the presence of moisture (perspiration, humidity, tears) , the dust dissolves to form a solution which may cause burns.
Eye contact: This product causes severe irritation, redness and pain. In the presence of moisture the dust dissolves to form a solution which may cause burns.
Ingestion: Causes irritation, a burning sensation of the mouth and throat and abdominal pain. May produce Sulphur Dioxide on mixing with (stomach) acids. Ingestion of very high levels may cause violent colic, diarrhea, central nervous system (CNS) depression and death.

Other health effects: Effects on the skin and eyes may be delayed, and damage may occur without the sensation or onset pain. Strict adherence to first aid measures following any exposure is essential. May cause allergic reactions, cardiovascular effects, central nervous system depression and respiratory sensitization or other allergic responses. CNC depression is characterized by headache, dizziness, drowsiness, nausea, vomiting and incoordination. Severe overexposure may lead to coma and possible death due to respiratory failure.

Section 7 - Preventative Measures

Personal Protective Equipment: Avoid contact with skin and eyes. Wear chemical protective gloves, goggles and face shield, rubber apron and boots. Eye wash fountains and safety shower facilities should be provided nearby for emergency use.

Respiratory protection: Use a NIOSH/MSHA approved air purifying, dust, mist and particulate respirator for concentrations up to 20 ppm Sulphur Dioxide or 50mg/M3 Sodium Metabisulphite.

Action to take for spills & leaks: In all cases of leak or spill contact vendor at emergency number shown at beginning. Avoid accumulation and dispersion of dust to reduce explosion potential. Eliminate all sources of ignition. Wear respirator, protective clothing and gloves. Avoid dry sweeping. Do not use compressed air to clean surfaces. Vacuuming is preferred. Return all material possible to container for proper disposal. Sweep up immediately to avoid slipping hazard. Do not allow spilled or waste product to flow into waterways. Keep product out of sewers, storm drains, surface run-off water and soil. Restrict access to non-protected personnel. Comply with all government regulations on spill reporting, and handling and disposal of waste.

Disposal methods: Dispose of contaminated product and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate federal, provincial and local regulatory agencies to ascertain proper disposal procedures. **Note:** empty containers can have residues, gasses and mists, and are subject to proper waste disposal as mentioned above.

Storage & Handling Precautions: Avoid accumulation and dispersion of dust to reduce explosion potential. Ground and bond equipment and containers to prevent a static charge buildup. Use spark resistant tools. Use normal "good" industrial hygiene housekeeping practices. Sweep up immediately to avoid slipping hazards. Keep container tightly closed when not in use. Store the material upright in a cool, dry, well ventilated place away from incompatible materials. Do not use pressure to empty container. Wash thoroughly after handling. Use with adequate ventilation.

Repair and Maintenance Precautions: Do not cut, grind, weld or drill in, on or near this container.

Section 8 - First Aid Measures

If inhaled: Remove victim to fresh air. Give artificial respiration if not breathing. Get immediate emergency medical attention. Keep the patient warm and at rest.

In case of eye contact: Immediately flush eyes with clean water for at least twenty (20) minutes, lifting the upper and lower eye lids to ensure complete flushing action of the eyeball. Get immediate emergency medical attention. Do not transport victim until the recommended flushing period has been completed, unless eye flushing can be carried out during transport.

In case of skin contact: Immediately flush skin with plenty of clean running water for at least twenty (20) minutes. Remove contaminated clothing and shoes. If irritation persists, get emergency medical attention. Wash and launder clothes before re-use.

In case of ingestion or swallowing: If victim is conscious, dilute stomach contents by giving one or two glasses of water, and induce vomiting by touching the finger to the back of the throat. Never give anything by mouth to an unconscious victim. GET IMMEDIATE EMERGENCY MEDICAL ATTENTION.

Section 9 - Preparation Information

Advance Chemicals Limited expressly disclaims all expressed or implied warranties of merchantability and fitness for a particular purpose with respect to the product provided. The information contained herein is offered only as a guide to the handling of this specific product, and has been prepared in good faith by technically knowledgeable personnel. This M.S.D.S. is not intended to be all inclusive, and the manner and conditions of use may involve other and additional considerations.

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