SAFETY DATA SHEET

Section 1: IDENTIFICATION

Product Identifier:	Sodium Sulphite, Catalyzed Sodium Sulphite, Catalyzed Plus
Other Means of Identification:	Disodium sulfite, Sodium sulfite.
Product Use and Restrictions on Use:	Bleach operations, reducing agent in the manufacture of dyes, photographic developers and fixers, food additive, water treatment dechlorinating agent.
Recommended Use:	Drilling Fluids Additive
Supplier:	Bri-Chem Supply Ltd. 27075 Acheson Road Acheson, AB T7X 6B1
Phone Number:	780-962-9490
Emergency Phone:	CHEMTREC 1-800-424-9300, 24/7

Section 2: HAZARD(S) IDENTIFICATION

Physical Hazards:	This product does not qualify for any physical hazard class under WHMIS 2015.
Health Hazards	
Carcinogenicity:	Category 1B
Signal Word:	Danger
Hazard Statements	
H350:	May cause cancer by inhalation.
Pictograms:	
Precautionary Statements	
Prevention	
P201:	Obtain special instructions before use.
P202:	Do not handle until all safety precautions have been read and understood.
P280:	Wear protective gloves, protective clothing, face protection
Response	
P308, P313:	If exposed or concerned: Get medical advice or attention.
Storage	
P405:	Store locked up

Disposal

P501: Dispose of contents / container in accordance with all federal, provincial and / or local regulations including the Canadian Environmental Protection Act.

Hazards Not Otherwise Classified: Contact with acids liberates toxic gas.

Supplemental Information: Not available

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients:

Chemical Name	Common Name(s)	CAS Number	Concentration (w/w%)
Sulphurous acid, disodium salt	Sodium Sulphite	7757-83-7	>90%
Sulfuric acid, cobalt (2+) salt (1:1)	Cobalt Sulphate	10124-43-3	0.01-0.1%

Section 4: FIRST-AID MEASURES

Description of Necessary First-Aid Measures

Inhalation: Get medical advice / attention if you feel unwell or are concerned. If exposed or concerned: Get medical advice / attention.

Ingestion: Ingestion Get medical advice / attention if you feel unwell or are concerned. If exposed or concerned: Get medical advice / attention.

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. If exposed or concerned: Get medical advice / attention.

Eye Contact: Gently brush product off face. Do not rub eyes. Let the eyes water naturally for a few minutes. Look right and left, then up and down. If particle / dust does not come out, cautiously rinse eye with lukewarm gently flowing water for 5 minutes or until particle / dust is removed, while holding the eyelids open. If eye irritation persists: Get medical advice / attention. Do not attempt to manually remove anything from the eyes.

Most Important Symptoms and Effects, both Acute and Delayed

Inhalation: May cause respiratory irritation. May cause cancer by inhalation.

Ingestion: May cause discomfort or nausea.

Skin Contact: Not available

Eye Contact: May cause eye irritation and redness.

Further Information:	For further information see Section 11 Toxicological Information.

Section 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	Extinguish fire using extinguishing agents suitable for the surrounding fire.
Unsuitable Extinguishing Media:	Water jets are not recommended in fires involving chemicals.
Specific Hazards Arising from the Chemical:	In the event of a fire oxides of sulphur may be released.
Special Protective Equipment for Fire-Fighters:	Wear NIOSH-approved self-contained breathing apparatus and chemical-protective clothing.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures:	Wear appropriate personal protective equipment (See Section 08 Exposure Controls and Personal Protection). Stay upwind, ventilate area.
Environmental Precautions:	Prevent material from entering waterways, sewers or confined spaces. Notify local health and wildlife officials. Notify operators of nearby water intakes.
Methods and Materials for Containment and Cleaning Up:	Dry sweeping is not recommended. Pre-damping the material or use of a vacuum is preferred. Shovel into clean, dry, labeled containers and cover. Flush area with water.

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.
Conditions for Safe Storage:	Store in a cool, dry, well-ventilated place away from heat sources and incompatible materials. materials. 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.
Incompatibilities:	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

Exposure Limits

Component	Regulation	Type of Listing	Value
Cobalt and inorganic compounds, as Com Total	ACGIH	TWA	0.02 mg/m³
Sulphur dioxide	ACGIH	TLV	5 ppm
	ACGIH	STEL	2 ppm

Engineering Controls

Ventilation Requirements: 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.

Other: No specific recommendations beyond the required hygiene facilities at the place of work.

Protective Equipment: The following are recommendations only. It is the responsibility of the employer / user to conduct a hazard assessment of the process in which this product being used and determine the proper engineering controls and PPE for their process. Additional regulatory and safety information should be sought from local authorities and, if needed, a professional industrial hygienist.

Eye and Face Protection: Where there is potential eye or face exposure, safety glasses are recommended. Contact lenses are not recommended; they may contribute to severe eye injury.

Hand and Body Protection: Where handling this product it is recommended that skin contact is avoided. Disposable latex or nitrile gloves are recommended to prevent incidental contact. Butyl rubber, neoprene, or PVC skin protection is recommended for extended contact. Leather gloves are not recommended for chemical protection. Refer to manufacturer's specifications for breakthrough times and permeability information; note that breakthrough times and permeability vary with temperature, application and age of material. Continued use of contaminated safety gear or clothing is not recommended; wash before reuse or discard.

Respiratory Protection: In case of insufficient ventilation wear suitable respiratory equipment.

Thermal Hazards: Not available

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical State:	Powder or granules
Colour:	White to pale yellow
Odour:	Odourless
Odour Threshold:	Not applicable
Property	
pH:	~8 @ 5%
Melting Point/Freezing Point:	~600°C
Initial Boiling Point and Boiling Range:	Decomposes
Flash Point:	Not applicable
Evaporation Rate:	Not available
Flammability:	Non-flammable
Upper Flammable Limit:	Not available
Lower Flammable Limit:	Not available
Vapour Pressure:	Not available
Vapour Density:	Not available
Relative Density:	2.63 g/cm³
Solubility:	17 g / 100 g water @ 10°C
Partition Coefficient: n-octanol/water:	Not available
Auto-Ignition Temperature:	Not available
Decomposition Temperature:	600 °C
Viscosity:	Not applicable
Specific Gravity:	Not applicable
Particle Characteristics:	Particle Size: Not available Particle Shape: Not available
Formula:	NA2SO3
Molecular Weight:	126.04 g/mol

Section 10: STABILITY AND REACTIVITY

Reactivity:	Reacts violently with acids.
Stability:	This product is stable if stored according to the recommendations in Section 07. Exposure to sunlight or high temperatures may cause the degradation of this product over time.
Possibility of Hazardous Reactions:	Reacts with acids to form toxic sulphur dioxide gas.
Conditions to Avoid:	Avoid contact with incompatible materials. Do not heat.
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. Sulphur dioxide and sodium sulphide.

Section 11: TOXICOLOGICAL INFORMATION

Acute Toxicity (LD50 / LC50 Values)

Component	Route	Species	Value	Exposure Time
Sodium Sulphite	Oral	Rat	3560 mg/kg	
	Inhalation	Rat	>5500 mg/m³	4 Hours

Toxic Health Effect Summary

Chemical Characteristics:	This product is a moderate reducing agent.
Skin:	Some individuals may develop a skin allergy.
Ingestion:	May cause discomfort or nausea.
Inhalation:	May cause respiratory irritation. May cause cancer by inhalation.
Eye Contact:	May cause eye irritation and redness.
Sensitization:	This product and its components at their listed concentration have no known sensitizing effects.
Mutagenicity:	Sodium sulfite has been demonstrated to be mutagenic in microbial systems; however, it is not mutagenic in studies involving insects and is not considered to present a mutagenic threat to multi-cell organisms.
Carcinogenicity:	NTP has classified cobalt sulphate as: Known to be a human carcinogen. IARC has classified cobalt sulphate as group 2B, possibly carcinogenic to humans.
Reproductive Toxicity:	This product and its components at their listed concentration have no known reproductive effects.

Specific Organ Toxicity: This product and its components at their listed concentration have no known effects on specific organs.

Aspiration Hazard: Not available

Synergistic Materials: Not available

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Component	Type	Species	Value	Exposure Time
Sodium Sulphite	LC50	Daphnia Magna	440 mg/L	48 Hours
	LC50	Western mosquitofish	460 mg/L	96 Hours

Biodegradability: The domestic substance list categorizes sodium sulphite and cobalt sulphate as persistent.

Bioaccumulation: The domestic substance list categorizes all of the components of this product as nonbioaccumulative.

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

Other Adverse Effects: The domestic substance list categorizes cobalt sulphate as inherently toxic to aquatic organisms.

Section 13: DISPOSAL CONSIDERATIONS

Waste from Residues / Unused Products: Dispose in accordance with all federal, provincial, and local regulations including the Canadian Environmental Protection Act.

Contaminated Packaging: Do not remove label, follow label warnings even after the container is empty. Empty containers should be recycled or disposed of at an approved waste handling facility.

Section 14: TRANSPORT INFORMATION

UN Number: This product does not meet the definition of dangerous goods per Part 2 of Transport of Dangerous Goods Regulations.

UN Proper Shipping Name and Description: Not available

Transport Hazard Class(es): Not available

Packing Group: Not available

Excepted Quantities: Not available

Environmental Hazards: Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.

Special Precautions: No special provisions

Transport in Bulk: ERAP Index: Not available
MARPOL 73/78 and IBC Code: This product is not listed in Chapter 17 of the IBC Code.

Additional Information:	Secure containers (full or empty) during shipment and ensure all caps, valves, or closures are secured in the closed position.
TDG Product Classification:	This product has been classified on the preparation date specified at Section 16 of this SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and published test data regarding the classification of this product are listed in the references at Section 16 of this SDS.

Section 15: REGULATORY INFORMATION

NOTE: THE PRODUCT LISTED ON THIS SAFETY DATA SHEET HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN HAZARDOUS PRODUCTS REGULATIONS. THIS SAFETY DATA SHEET CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.

All components of this product appear on the domestic substance list.

Section 16: OTHER INFORMATION

References:

1) CHEMINFO
2) TOXNET
3) eChemPortal
4) ECHA
5) Transportation of Dangerous Goods Canada
6) HSDB
7) PAN

Disclaimer:
The information contained herein is based on data available to us and is believed to be true and accurate. However, no guarantee or warranty is provided, expressed or implied, by the company or its subsidiaries regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained from the use thereof. Since the use of this product is within the exclusive control of the user, we do not assume any responsibility and expressly disclaim any liability for any use of this product. It is the user's responsibility to determine the conditions of safe use, storage, and disposal of the product. Compliance with all applicable federal, provincial, and local regulations remains the responsibility of the user.

Prepared by: Bri-Chem Supply Ltd.
Revision Date: August 12, 2024