



# JONES-HAMILTON CO.

30354 Tracy Road, Walbridge, OH 43465-9792

(419) 666-9838

## MATERIAL SAFETY DATA SHEET

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### SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

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**Product Name:** Sodium bisulfate, anhydrous globular, technical

**Product Code:** SBS01

**Synonyms:** Nitre cake, GBS

**Product Use:** Cleaning compounds, pH adjustment. *Not intended for use in food or feed.*

**Issue Date:** 3/12/07

**Supersedes Date:** 11/11/05

**Manufacturer's Name/Address:** Jones-Hamilton Co.  
30354 Tracy Road  
Walbridge, OH 43465

**24-Hour Emergency Phone Numbers [U.S.A.]:**  
Ohio: (419) 666-9838  
CHEMTREC: (800) 424-9300

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### SECTION 2 HAZARDS IDENTIFICATION

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#### EMERGENCY OVERVIEW

Solid off-white granular material, with the consistency of salt.

**WARNING:** Causes eye irritation. May cause skin and respiratory tract irritation. Avoid contact with eyes and skin. Avoid breathing dust. Wash exposed skin thoroughly after handling.

**Likely Routes of Exposure:** Eye contact, skin contact, inhalation.

#### Potential Acute Health Effects

**Eye:** Causes mild to severe irritation. May cause burn if not flushed with water.

**Skin:** Prolonged exposure may cause moderate irritation. May cause burn if not flushed with water.

**Inhalation:** Inhalation of dust may irritate or burn nose, throat and lungs.

**Ingestion:** Small amounts (tablespoonful) swallowed are not likely to cause injury; however, swallowing large amounts may irritate or burn digestive tract.

#### Potential Chronic Health Effects

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC, ACGIH or NTP.

**Medical Conditions Aggravated by Exposure:** Pre-existing respiratory conditions.

**See Section 11 for toxicological information.**

This material meets the definition of an irritant as defined in OSHA's Hazard Communication Standard (29 CFR 1910.1200) and the WHMIS Controlled Product Regulation in Canada.

**Potential Environmental Effects:** Material in dry form is not hazardous to the environment. However, readily dissolves in water to form a weak acidic solution that is harmful to aquatic life.

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### SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

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<u>Component</u>	<u>CAS#</u>	<u>% (by weight)</u>
Sodium bisulfate	7681-38-1	91.5 – 94.7
Sodium sulfate	7757-82-6	4.8 – 8.0
Moisture	7732-18-5	0.1 – 0.5

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### SECTION 4 FIRST AID MEASURES

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**NOTE TO PHYSICIAN:** Supportive care. Treatment based on judgment of the physician in response to reactions of the patient. May aggravate pre-existing respiratory conditions.

**Eyes:** Immediately flush eyes with water for at least 15 minutes, lifting eyelids to thoroughly flush. If redness or irritation persists, get prompt medical attention.

**Skin:** Immediately flush affected area with water for at least 15 minutes. If burn occurs, seek immediate medical attention.

**Inhalation:** Remove to fresh air. If irritation or discomfort persists, seek medical attention.

**Ingestion:** If large amounts are ingested (greater than tablespoonful), drink large quantities of milk or water. Follow with Milk of Magnesia, beaten eggs or vegetable oil. DO NOT induce vomiting. **Contact Physician immediately.**

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### SECTION 5 FIRE FIGHTING MEASURES

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**Extinguishing Media:** Use extinguishing media appropriate for surrounding fire. Because material will readily dissolve in water to form a weak acid solution, avoid water contact with material if possible.

**Hazardous Combustion Products:** At temperatures over 806<sup>o</sup> F (430<sup>o</sup> C), product will decompose generating oxides of sulfur.

**Fire Fighting Instructions:** Product readily dissolves in water to form a weak acid solution. If using water, wear acid protective equipment. No gases or toxic fumes are emitted from this reaction. However, if elevated temperatures (> 806<sup>o</sup>F) are reached, self-contained breathing apparatus should be worn.

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## SECTION 6 ACCIDENTAL RELEASE MEASURES

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**Personal Precautions:** Use personal protection recommended in Section 8.

**Land Spill:** Vacuum or shovel material and place in disposal container. Avoid excessive dust generation. Dilute residual material with ample supply of water and direct to sanitary sewer if Federal, State or Local regulations permit.

**Water Spill:** Readily dissolves in water to form a weak acid solution. If water is isolated or can be contained, neutralize with weak alkaline solution.

*Notify appropriate authorities if required by regulations.*

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## SECTION 7 HANDLING AND STORAGE

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**Handling:** Wear all recommended personal protective clothing when handling. Avoid contact with eyes. Wash thoroughly after handling. Minimize dust generation. Avoid breathing dust.

**Storage:** Material is hygroscopic and will readily absorb moisture. Keep containers tightly closed. DO NOT store where exposed to moist conditions. DO NOT store near strong alkalis.

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## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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**Exposure Guidelines:**

Sodium bisulfate – Not established.

Sodium sulfate – Not established.

**Engineering Controls:** Provide general and/or local exhaust ventilation to maintain airborne particulate below nuisance levels ( $>10$  mg/m<sup>3</sup>).

**Eye/Face Protection:** Safety glasses or goggles.

**Skin Protection:** Rubber gloves and cotton-blend coveralls.

**Respiratory Protection:** In dusty atmospheres ( $>10$  mg/m<sup>3</sup>), use a NIOSH-approved dust respirator.

**General Hygiene Considerations:** There are no known health hazards associated with this material when used as recommended. Follow good industrial hygiene practices including but not limited to: (1) avoid breathing dust; (2) avoid contact with eyes; and (3) wash thoroughly after handling.

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## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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**Appearance:** Off-white granular material.

**Odor:** Fresh to Pungent

**Physical State:** Dry (Anhydrous) crystalline solid spherical shape beads

**pH:** <1 @ 5% aqueous solution

**Solubility (in water):** 1080 g/l @ 68° F (20° C)

**Particle Size:** ±0.75 mm diameter

**Flammability (solid):** Material is non-combustible

**Melting Point:** 350° F (177° C)

**Bulk Density:** 80 – 85 lbs/ft<sup>3</sup> (loose)

**Molecular Formula:** NaHSO<sub>4</sub>

**Molecular Weight:** 120

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## SECTION 10 STABILITY AND REACTIVITY

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**Stability:** Stable.

**Conditions to Avoid:** **DO NOT** store dry product where exposed to moist conditions.

**Incompatible Materials:** Avoid contact with strong alkaline material such as caustic. Dissolves readily in water to form a weak acid solution. **DO NOT MIX** dry or concentrated solutions of this product with concentrated solutions of chlorine bleach, ammonia cleansers or similar products.

**Hazardous Decomposition Products:** Only if heated over 806° F (430° C), at which sulfur dioxide and sulfur trioxide are formed.

**Possibility of Hazardous Reactions:** Will not occur.

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## SECTION 11 TOXICOLOGICAL INFORMATION

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**Reported Human Effects:** No human data are available for this product.

**Reported Animal Effects:** Oral – LD<sub>50</sub> (rat) 2800 mg/kg.

Skin irritation – This material is neither corrosive nor destructive to the skin of New Zealand rabbits. Occasionally, a very slight rash may appear.

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## SECTION 12 ECOLOGICAL INFORMATION

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**Ecotoxicity:** This product readily dissolves in water to form a weak acid solution. A 0.05 percent or greater (by weight) solution of this product will likely be acutely harmful to aquatic life.

**Chemical Fate Information:** Material will decompose in soil. Studies show that there are no adverse effects of applying the main ingredient in this product (sodium bisulfate) directly to crops. In fact, there are existing products on the market that use sodium bisulfate as a soil additive to improve crop production. However, do not apply excessive quantities to soil.

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## **SECTION 13 DISPOSAL CONSIDERATIONS**

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If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA), 40 CFR Part 261. Dispose of in accordance with local, State, Provincial and Federal laws and regulations.

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## **SECTION 14 TRANSPORT INFORMATION**

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**Shipment in the United States of America (DOT):** Not regulated.

**Shipment by water (IMO):** Not regulated.      **Shipment by air (ICAO & IATA):** Not regulated.

**Shipment in Canada (TDG):** Not regulated.      **Surface Shipments in Europe:** Not regulated.

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## **SECTION 15 REGULATORY INFORMATION**

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**TSCA:** All chemical substances in this product are listed in U.S. TSCA Section 8(b) Inventory.

**CERCLA (RQ):** This product contains no Hazardous Substances listed in 40 CFR Part 302.

**SARA Title III:** Section 311/312 Hazard Class – Acute.

This product contains none of the substances subject to the reporting requirements of Section 313 (40 CFR Part 372).

**California Proposition 65:** This product does not contain any ingredient known to the State of California to cause cancer or reproductive toxicity as listed under the Safe Drinking Water and Toxic Enforcement Act of 1986.

**New Jersey:** Department of Health RTK List – sn 1704. Special Hazardous Substances – Corrosive

**Australia:** List of Designated Hazardous Substances – Corrosive (R34), Harmful (R37)

**Canada – WHMIS:** Controlled Product Hazard Class D2B. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**Canada – CEPA:** All components of this product are on the Domestic Substances List (DSL), and acceptable for use under the provisions of CEPA.

**European Union (EU):** Dangerous Substances (Annex I)

- EC No. 231-665-7
- Labels: Xi (irritant)
- Risk Phrases: R41
- Safety Phrases: S(2-)24-26

**Germany:** Water Classification (VwVwS) – Water Hazard Class: 1

**Switzerland:** Toxic Substance Classification – Giftklasse 3

**Inventories:** Australian Inventory of Chemical Substances; China; European Industry of Existing Commercial Chemical Substances (231-665-7); European Union Inventory of Cosmetic Ingredients, Other Ingredients; ICCA High Production Volume Working List; Japan Existing and New Chemical Substances (1-83, 1-491, 1-501); Korea Existing and Evaluated Chemical Substances (KE-31481); Philippines Inventory of Chemicals and Chemical Substances; OECD List of High Production Volume Chemicals.

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## **SECTION 16 OTHER INFORMATION**

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**NSF/ANSI Standard 60:** Function – Corrosion and scale control, pH adjustment;  
Maximum use rate – 500 mg/L

**HMIS® Rating:** Health – 1; Flammability – 0; Physical Hazard – 0

**NFPA 704 Rating:** Health – 1; Fire – 0; Reactivity – 0

(0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard)

This document was prepared following ANSI's recommendations for Material Safety Data Sheet Preparation (ANSI Z400.1-2004). The following changes have been made in this updated:

- Product use restriction statement amended in Section 1.
- Wording was amended in Section 10 under "*Incompatible Materials*" to clarify that mixture of very dilute solutions of this product with very dilute solutions of chlorine bleach, ammonia cleansers or similar products should not pose health or safety risks.
- NSF/ANSI Standard 60 use information added to Section 16.

### **DISCLAIMER**

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**MSDS prepared by:**



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