

Leslie's Swimming Pool Supplies
Material Safety Data Sheet

Date Prepared: February 4, 1993
Material Name: **Sodium Bisulfate**

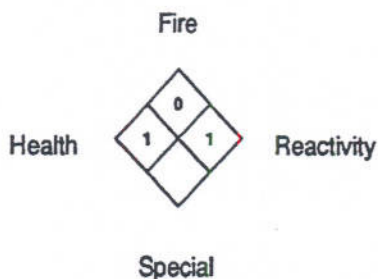
MSDS No.: 14356JON
Telephone No. (818) 993-4212

24 HOUR EMERGENCY PHONE: CHEMTREC 800-424-9300

SECTION I - GENERAL INFORMATION

Manufacturer's Name: Jones-Hamilton Co.
Manufacturer's Address: 8400 Enterprise Drive, Newark, CA 94560
Manufacturer's Phone (Emergency): 510-797-2471
Manufacturer's Phone (Other): 510-792-4500
Trade/Product Name: Leslie's Dry Acid
Synonyms: Sodium Hydrogen Sulfate, Sodium Acid Sulfate, Nitre Cake
Chemical Name: Sodium bisulfate, anhydrous
Chemical Formula: NaHSO₄
Chemical Family: Acid
CAS No.: 7681-38-1
DOT Proper Shipping Name: Not Regulated
DOT Hazard Class: Not classified as hazardous

NFPA Hazard Ratings:



FIRE: Materials that will not burn.

HEALTH: Materials only slightly hazardous to health. It may be desirable to wear self-contained breathing apparatus.

REACTIVITY: Materials that (in themselves) are normally stable but which may become unstable at elevated temperatures and pressures or which may react with water with some release of energy but not violently. Caution must be used in approaching the fire and applying water.

SPECIAL:

Based on the National Fire Protection Association rating system

SECTION II - INGREDIENTS

Regulated components:

CAS NO.	INGREDIENT	WT. %	OSHA PEL:	OSHA TLV:
7681-38-1	Sodium bisulfate	93.2	None established	None established
7757-82-6	Sodium sulfate	6.5	None established	None established

Leslie's Swimming Pool Supplies
Material Safety Data Sheet

February 4, 1993

Material Name: **Sodium Bisulfate**

MSDS No: 14356JON
Telephone No. (818) 993-4212

SECTION III - PHYSICAL DATA

MELTING POINT: 350°F

BULK DENSITY: 83 LBS./FT³

SOLUBILITY: 100%

PERCENT VOLATILE: Non-volatile

DESCRIPTION: Off-white, bead-like, granular dry material

SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT: Not applicable

EXPLOSIVE LIMITS:

LEL: Not applicable

UEL: Not applicable

EXTINGUISHING MEDIA: Water or dry chemical as appropriate for combustibles in area. avoid water contact to material if possible.

HAZARDOUS THERMAL DECOMPOSITION PRODUCTS: At temperatures over 570°F, product will decompose, generating oxides of sulfur.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Product readily dissolves in water to form a weak sulfuric acid solution. No gases or toxic fumes are emitted from this reaction, but precautions for exposure to sulfuric acid should be followed.

SPECIAL FIRE FIGHTING PROCEDURES: If water is used to extinguish combustibles and product is dissolved in water forming sulfuric acid, wear protective equipment. If elevated temperatures (>570°F) are reached, self-contained breathing apparatus should be worn.

SECTION V - HEALTH HAZARD AREA

PRINCIPAL HEALTH HAZARDS, INCLUDING SIGNIFICANT ROUTES, EFFECTS, AND SYMPTOMS OF OVEREXPOSURE AND MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE MAY BE:

EYE: Mild to severe irritant. May cause burns if not flushed with water.

SKIN: Moderate irritant. May cause burns if not flushed with water.

INHALATION: Irritant. May irritate or burn nose, throat and lungs. No exposure limits established.

INGESTION: Irritant. May irritate or burn mouth, esophagus or stomach. Animal test Data: LD₅₀ Rat 2800 mg/kg.

CARCINOGENICITY: Not listed as a carcinogen by NTP, IARC or OSHA>

Leslie's Swimming Pool Supplies
Material Safety Data Sheet

February 4, 1993

Material Name: **Sodium Bisulfate**

MSDS No: 14356JON

Telephone No. (818) 993-4212

SECTION V - HEALTH HAZARD AREA - CONTINUED

FIRST AID

IN EYES: Immediately flush with water for 15 minutes, lifting eyelids to thoroughly flush. Get prompt medical attention.

ON SKIN: Immediately flush with water for 15 minutes. If burn occurs, obtain medical help.

IF INHALED: Move to fresh air location. If irritation or discomfort persists, seek medical attention.

IF SWALLOWED: Drink large quantities of milk or water. Follow with milk of magnesia, beaten eggs or vegetable oil. Do not induce vomiting. Contact physician immediately.

NOTES TO PHYSICIAN:

EYES: Natural watering of eyes will dissolve sodium bisulfate, forming a weak sulfuric acid solution which may cause burns. Flush affected area thoroughly with water. Do not use chemical antidotes or neutralizing solutions.

SKIN: Mild burns may occur if not thoroughly flushed previously.

INHALATION: Mild burning sensations may occur to mucous membranes and upper respiratory tract.

INGESTION: Body water content will react with sodium bisulfate to form a weak sulfuric acid solution, which may burn tissues in mouth, esophagus or stomach. Solution should be diluted to reduce burning effect.

SECTION VI - REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY: Avoid contact with strong alkaline materials such as caustic. Reacts with water to form a weak sulfuric acid solution. Do not mix with liquid chlorine bleach, ammonia cleansers or similar products.

CONDITIONS TO AVOID: Store in dry area to avoid moisture contact.

HAZARDOUS DECOMPOSITION: None, unless heated over 570°F, at which sulfur dioxide and sulfur trioxide are formed.

SECTION VII - SPILL OR LEAK PROCEDURES

SMALL SPILLS: Material is a granular product and can be swept up from surfaces.

LARGE SPILL: Pick up as much material as possible with shovel or other tools. Neutralize balance of spill with alkaline solution and wash down to sewer if Federal, State or local regulations permit.

Leslie's Swimming Pool Supplies
Material Safety Data Sheet

February 4, 1993

Material Name: **Sodium Bisulfate**

MSDS No: 14356JON

Telephone No. (818) 993-4212

SECTION VII - SPILL OR LEAK PROCEDURES - CONTINUED

WASTE DISPOSAL METHODS: Comply with all Federal, State and local regulations.

SECTION VIII - PROTECTION EQUIPMENT TO BE USED

VENTILATION: Local ventilation to a dust collector is recommended.

RESPIRATORY PROTECTION: NIOSH or MSHA certified dust mask should be worn while handling product to control exposure below nuisance dust limits of 10 mg/m³.

PROTECTIVE GLOVES: Wear acid resistant gloves such as rubber or neoprene.

EYE PROTECTION: Safety glasses or goggles

OTHER PROTECTIVE EQUIPMENT: Clothes should completely cover skin to avoid contact. Coats, coveralls or aprons are recommended.

SECTION IX - SPECIAL PRECAUTIONS

Avoid contact with skin, eyes or clothing.

Do not store where exposed to moist conditions or near strong alkalis.

Keep containers tightly closed.

Wear all recommended protective equipment when handling.

The data in this material safety data sheet relates only to the specific material designated herein and does not relate to use in combination with any other material in any process. The information set forth herein is furnished free of charge and is based on technical data that Jones-Hamilton co. believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under or a recommendation to infringe any patents.

February 4, 1993

Material Name: **Sodium Bisulfate**

MSDS No: 14356JON

Telephone No. (818) 993-4212

SECTION X - PREPARATION INFORMATION

For additional Non-Emergency health, safety or environmental information, call or write the following manufacturer or distributor:

Jones-Hamilton Company
8400 Enterprise Drive
Newark, CA 94560
Emergency Phone: 510-797-2471
Other Information Phone: 510-792-4500

For additional, **non-emergency** information about this product or its use, please contact:

Leslie's Swimming Pool Supplies
Technical Assistance
20222 Plummer Street
Chatsworth, CA 91311
Phone 818-993-4212

This Material Safety Data Sheet (MSDS) was retyped onto this form and in this format from the original MSDS supplied to Leslie's Swimming Pool Supplies by the manufacturer or distributor of the product named herein. Leslie's Swimming Pool Supplies disclaims all liability for the content. Leslie's Swimming Pool Supplies has included all information

contained on the original MSDS supplied to us. No information contained on the original supplied to us has been changed or omitted.

The above information is based upon information Leslie's Swimming Pool Supplies believes to be reliable and is supplied for informational purposes only. Leslie's Swimming Pool Supplies disclaims any liability for damage which results from the use of the above information and nothing contained therein shall constitute a guarantee, warranty (including fitness for a particular purpose) or representation by Leslie's Swimming Pool Supplies with respect to the accuracy or completeness of the data, the product described or their use for any specific purpose even if that purpose is known to Leslie's Swimming Pool Supplies. The final determination of the suitability of the information, the manner of use of the information or product and potential infringement is the sole responsibility of the user.