



JUN 06 2002

# MATERIAL SAFETY DATA SHEET

PRODUCT

**NALCO 2549 PULV O2 SCAVENGER**

Emergency Telephone Number  
Medical (800) 462-5378 (24 hours) (800) I-M-ALERT

## SECTION 01 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: NALCO 2549 PULV O2 SCAVENGER  
DESCRIPTION: Sodium sulfite, carbonate, lignosulfonate and cobalt sulfate  
NFPA 704M/HMIS RATING: 1/1 HEALTH 0/0 FLAMMABILITY 0/0 REACTIVITY 0 OTHER  
0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

## SECTION 02 COMPOSITION AND INFORMATION ON INGREDIENTS

Our hazard evaluation has identified the following chemical ingredient(s) as hazardous under OSHA's Hazard Communication Rule, 29 CFR 1910.1200. Consult Section 15 for the nature of the hazard(s).

INGREDIENT(S)	CAS #	APPROX.%
Sodium sulfite	7757-83-7	70-100

## SECTION 03 HAZARD IDENTIFICATION

### EMERGENCY OVERVIEW:

CAUTION! May be harmful if swallowed. May cause irritation to skin and eyes. Avoid contact with eyes, and prolonged or repeated contact with skin. Do not take internally. dust. Do not take internally.

Empty containers may contain residual product. Do not reuse container unless properly reconditioned.

PRIMARY ROUTE(S) OF EXPOSURE: Eye, Skin, Inhalation

EYE CONTACT: Can cause moderate irritation.  
 SKIN CONTACT: Can cause moderate irritation.  
 INGESTION: Can be harmful.  
 INHALATION: Can cause severe respiratory irritation if mist is inhaled.

SYMPTOMS OF EXPOSURE: Sodium sulfite ingestion is believed to cause an asthmatic, allergic reaction in susceptible individuals.

AGGRAVATION OF EXISTING CONDITIONS: A review of available data does not identify any worsening of existing conditions.

## SECTION 04 FIRST AID INFORMATION

EYES: Flush with water for 15 minutes. Call a physician.  
 SKIN: Flush with water for 15 minutes.  
 INGESTION: Induce vomiting. Give water. Call a physician.  
 INHALATION: Remove to fresh air. Treat symptoms. Call a physician.

NOTE TO PHYSICIAN: Based on the individual reactions of the patient, the physician's judgment should be used to control symptoms and clinical condition.

CAUTION: If unconscious, having trouble breathing or in convulsions, do not



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induce vomiting or give water.

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**SECTION 05 FIRE FIGHTING MEASURES**  
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FLASH POINT: Not applicable

EXTINGUISHING MEDIA: Not applicable

UNUSUAL FIRE AND EXPLOSION HAZARD: May evolve SOx under fire conditions.

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**SECTION 06 ACCIDENTAL RELEASE MEASURES**  
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IN CASE OF TRANSPORTATION ACCIDENTS, CALL THE FOLLOWING 24-HOUR TELEPHONE NUMBER (800) I-M-ALERT or (800) 462-5378.

SPILL CONTROL AND RECOVERY:

Solid spills: Sweep or vacuum up and reclaim into recovery or salvage drums for disposal. Wear the protective equipment specified in Section 10. Refer to CERCLA in Section 15.

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**SECTION 07 HANDLING AND STORAGE**  
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Storage : Keep container closed when not in use.

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**SECTION 08 EXPOSURE CONTROLS AND PERSONAL PROTECTION**  
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RESPIRATORY PROTECTION: Respiratory protection not normally needed. If significant dusting occurs, wear either a disposable dust mask or a cartridge respirator with prefilter or high efficiency cartridge.

For large spills, entry into large tanks, vessels or enclosed small spaces with inadequate ventilation, a positive pressure, self-contained breathing apparatus is recommended.

VENTILATION: If significant dusting occurs, local exhaust ventilation is recommended.

PROTECTIVE EQUIPMENT: No special precautions. Avoid eye and skin contact, and inhalation of dust.

The availability of an eye wash fountain and safety shower is recommended.

If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

HUMAN EXPOSURE CHARACTERIZATION: Based on Nalco's recommended product application and our recommended personal protective equipment, the potential human exposure is: MODERATE.

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**SECTION 09 PHYSICAL AND CHEMICAL PROPERTIES**  
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COLOR: Tan to gray      FORM: Powder      ODOR: Sweet



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BULK DENSITY: 90 lbs/ft3  
SOLUBILITY IN WATER: Completely  
pH (AT 5%) = 8.2 ASTM E-70  
FLASH POINT: Not applicable

NOTE: These physical properties are typical values for this product.

## SECTION 10 STABILITY AND REACTIVITY

INCOMPATIBILITY: Reacts vigorously with strong oxidizers. May release SO<sub>2</sub> or hydrogen sulfide on contact with acids.

THERMAL DECOMPOSITION PRODUCTS: In the event of combustion CO, CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>x</sub> may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment.

## SECTION 11 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY STUDIES: Acute toxicity studies have not been conducted on this product, but toxicity studies of the ingredient(s) in Section 2 have been reviewed. The results are shown below.

ACUTE ORAL TOXICITY (ALBINO RABBITS):  
Sodium sulfite LD<sub>50</sub> = 2,825 mg/kg

HUMAN HAZARD CHARACTERIZATION: Based on our hazard characterization, the potential human hazard is: LOW

## SECTION 12 ECOLOGICAL INFORMATION

BIOCHEMICAL OXYGEN DEMAND (5-day BOD): 93,800 ppm

CHEMICAL OXYGEN DEMAND (COD): 206,000 ppm

If released into the environment, see CERCLA in Section 15.

ENVIRONMENTAL HAZARD AND EXPOSURE CHARACTERIZATION: Based on our Hazard Characterization, the potential environmental hazard is: HIGH.  
Based on Nalco's recommended product application and the product's characteristics, the potential environmental exposure is: LOW.

## SECTION 13 DISPOSAL CONSIDERATIONS

DISPOSAL: If this product 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 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

As a non-hazardous solid waste, it can be disposed of in an industrial waste landfill in accordance with local, state, and federal regulations.

## SECTION 14 TRANSPORTATION INFORMATION



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PROPER SHIPPING NAME/HAZARD CLASS MAY VARY BY PACKAGING, PROPERTIES,  
AND MODE OF TRANSPORTATION. TYPICAL PROPER SHIPPING NAMES FOR THIS  
PRODUCT ARE:

ALL TRANSPORTATION MODES : PRODUCT IS NOT REGULATED  
DURING TRANSPORTATION

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**SECTION 15 REGULATORY INFORMATION**  
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The following regulations apply to this product.

FEDERAL REGULATIONS:

OSHA'S HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:  
Based on our hazard evaluation, the following ingredient in this product is  
hazardous and the reason is shown below.

Sodium sulfite - Eye irritant

Sodium sulfite = TWA 10 mg/m3 (nuisance dust) ACGIH/TLV

Sodium sulfite = TWA 10 mg/m3 (total dust) OSHA/PEL  
5 mg/m3 (respirable dust) OSHA/PEL

CERCLA/SUPERFUND, 40 CFR 117, 302:  
Notification of spills of this product is not required.

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986  
(TITLE III) - SECTIONS 302, 311, 312 AND 313:

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):  
This product does not contain ingredients listed in Appendix A and B as an  
Extremely Hazardous Substance.

SECTIONS 311 and 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370):  
Our hazard evaluation has found this product to be hazardous. The product  
should be reported under the following EPA hazard categories:

- XX Immediate (acute) health hazard
- Delayed (chronic) health hazard
- Fire hazard
- Sudden release of pressure hazard
- Reactive hazard

Under SARA 311 and 312, the EPA has established threshold quantities for the  
reporting of hazardous chemicals. The current thresholds are: 500 pounds or  
the threshold planning quantity (TPQ), whichever is lower, for extremely  
hazardous substances and 10,000 pounds for all other hazardous chemicals.

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):  
This product does not contain ingredients on the List of Toxic Chemicals.



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**TOXIC SUBSTANCES CONTROL ACT (TSCA):**  
The chemical ingredients in this product are on the 8(b) Inventory List (40 CFR 710).

**FOOD AND DRUG ADMINISTRATION (FDA):**  
Federal Food, Drug and Cosmetic Act:  
When use situations necessitate compliance with FDA regulations, this product is acceptable under 21 CFR 173.310 Boiler Water Additives.

**U. S. DEPARTMENT OF AGRICULTURE (USDA):**  
USDA Inspection and Grading Programs - Food Safety and Inspection Service:  
This product is authorized by USDA for use in federally inspected meat and poultry plants. Authorized uses are under categories G5 and G6.

This product has been certified as KOSHER/PAREVE for year-round use EXCEPT FOR THE PASSOVER SEASON by the CHICAGO RABBINICAL COUNCIL.

**RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261 SUBPART C & D:**  
Consult Section 13 for RCRA classification.

**FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15**  
(formerly Sec. 307), 40 CFR 116 (formerly Sec. 311):  
None of the ingredients are specifically listed.

**CLEAN AIR ACT, Sec. 111 (40 CFR 60), Sec. 112 (40 CFR 61, 1990 Amendments),**  
Sec. 611 (40 CFR 82, CLASS I and II Ozone depleting substances):  
This product does not contain ingredients covered by the Clean Air Act.

**STATE REGULATIONS:**

**CALIFORNIA PROPOSITION 65:**  
This product does not contain any chemicals which require warning under California Proposition 65.

**MICHIGAN CRITICAL MATERIALS:**  
This product contains the following substance(s) identified on the Michigan Critical Materials Register:

Cobalt compounds (as CO)

**STATE RIGHT TO KNOW LAWS:**  
The following ingredient(s) are disclosed for compliance with State Right To Know Laws:

Cobalt sulfate	10124-43-3
Sodium carbonate	497-19-8
Sodium lignosulfonate	8061-51-6
Sodium sulfite	7757-83-7

**INTERNATIONAL REGULATIONS:**

This is a WHMIS controlled product under The House of Commons of Canada Bill C-70 (Class D2B). The product contains the following substance(s), from the Ingredient Disclosure List or has been evaluated based on its toxicological



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properties, to contain the following hazardous ingredients(s):

Chemical Name	CAS #	% Concentration Range
Sodium sulfite	7757-83-7	70-100

### SECTION 16 OTHER INFORMATION

None

### SECTION 17 RISK CHARACTERIZATION

Due to our commitment to Product Stewardship, we have evaluated the human and environmental hazards and exposures of this product. Based on our recommended use of this product, we have characterized the product's general risk. This information should provide assistance for your own risk management practices. We have evaluated our product's risk as follows:

- \* The human risk is: LOW.
- \* The environmental risk is: LOW.

Any use inconsistent with Nalco's recommendations may affect our risk characterization. Our sales representative will assist you to determine if your product application is consistent with our recommendations. Together we can implement an appropriate risk management process.

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations. Please consult your local sales representative for any further information.

### SECTION 18 REFERENCES

Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, American Conference of Governmental Industrial Hygienists, OH.

Hazardous Substances Data Bank, National Library of Medicine, Bethesda, Maryland (CD-ROM version), Micromedex, Inc., Englewood, CO.

IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man, Geneva: World Health Organization, International Agency for Research on Cancer.

Integrated Risk Information System, U.S. Environmental Protection Agency, Washington, D.C. (CD-ROM version), Micromedex, Inc., Englewood, CO.

Annual Report on Carcinogens, National Toxicology Program, U.S. Department of Health and Human Services, Public Health Service.



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Title 29 Code of Federal Regulations, Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA).

Registry of Toxic Effects of Chemical Substances, National Institute for Occupational Safety and Health, Cincinnati, Ohio (CD-ROM version), Micromedex, Inc., Englewood, CO.

Shepard's Catalog of Teratogenic Agents (CD-ROM version), Micromedex, Inc., Englewood, CO.

Suspect Chemicals Sourcebook (a guide to industrial chemicals covered under major regulatory and advisory programs), Roytech Publications (a Division of Ariel Corporation), Bethesda, MD.

The Teratogen Information System, University of Washington, Seattle, Washington (CD-ROM version), Micromedex, Inc., Englewood, CO.

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