

PRODUCT

NALCO 71D5 PLUS ANTIFOAM

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

(800) I-M-ALERT

SECTION 01 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: NALCO 71D5 PLUS ANTIFOAM

DESCRIPTION: A blend of polyglycol, polyglycol ester, and fatty acid

NFPA 704M/HMIS RATING 1/2 HEALTH 2/2 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.%
n-Decanol n-Octanol Paraffin wax Hydrotreated light distillate Straight run middle distillate	112-30-1 111-87-5 8002-74-2 64742-47-8 64741-44-2	1-5 5-10 0-1 10-20 40-70

SECTION 03 HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

WARNING! Causes irritation to skin and eyes. Combustible. Prolonged inhalation of vapor may be harmful. Do not get in eyes, on skin or on clothing. Wear goggles and face shield when handling. Avoid prolonged or repeated breathing of vapor. Use with adequate ventilation. Do not take internally. Keep away from heat and open flame. Keep container closed when not in use.

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

PRIMARY ROUTE(S) OF EXPOSURE: Eye, Skin

EYE CONTACT:

Can cause moderate irritation.

SKIN CONTACT:

Can cause moderate irritation.

INGESTION:

Can cause central nervous system depression, nausea, dizziness, vomiting or unconsciousness depending on the length of exposure and on the first aid action given.

SYMPTOMS OF EXPOSURE:

ACUTE: Inhalation of high concentrations of product can cause nausea, dizziness, vomiting, stupor or unconsciousness.

CHRONIC: Prolonged skin contact with product can cause dry skin and defatting resulting in irritation and dermatitis.

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

SECTION 04 FIRST AID INFORMATION

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EYES: Immediately flush with water for at least 15 minutes while

holding eyelids open. Call a physician at once.

SKIN: Immediately flush with water for at least 15 minutes. For a

large splash, flood body under a shower. Call a physician

at once.

INGESTION: Do not 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 induce vomiting or give water.

SECTION 05 FIRE FIGHTING MEASURES

FLASH POINT: 197 Degrees F (PMCC) ASTM D-93

EXTINGUISHING MEDIA: Based on the NFPA guide, use dry chemical, foam, carbon dioxide or other extinguishing agent suitable for Class B fires. Use water to cool containers exposed to fire. For large fires, use water spray or fog, thoroughly drenching the burning material.

UNUSUAL FIRE AND EXPLOSION HAZARD: None known

SECTION 06 ACCIDENTAL RELEASE MEASURES

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

SPILL CONTROL AND RECOVERY:

Small liquid spills: Contain with absorbent material, such as clay, soil or any commercially available absorbent. Shovel reclaimed liquid and absorbent into recovery or salvage drums for disposal. Refer to CERCLA in Section 15.

Large liquid spills: Dike to prevent further movement and reclaim into recovery or salvage drums or tank truck for disposal. Refer to CERCLA in Section 15.

For large indoor spills, evacuate employees and ventilate area. Those responsible for control and recovery should wear the protective equipment specified in Section 8.

SECTION 07 HANDLING AND STORAGE

Storage: Keep container closed when not in use.

SECTION 08 EXPOSURE CONTROLS AND PERSONAL PROTECTION

RESPIRATORY PROTECTION: Respiratory protection is not normally needed since the volatility and toxicity are low. If significant mists are generated, use either a chemical cartridge respirator with a dust/mist prefilter or supplied air.

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FORM: Liquid

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: General ventilation is recommended.

PROTECTIVE EQUIPMENT: Use impermeable gloves and chemical splash goggles when attaching feeding equipment, doing maintenance or handling product. Examples of impermeable gloves available on the market are neoprene, nitrile, PVC, natural rubber, viton and butyl (compatibility studies have not been performed).

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.

SECTION 09 PHYSICAL AND CHEMICAL PROPERTIES

COLOR: Clear, light yellow

DENSITY:

SPECIFIC GRAVITY:

VISCOSITY:

FREEZE POINT: FLASH POINT:

7.0 lbs/gal.

0.84 @ 77 Degrees F 10 cps @ 72 Degrees F Less than -50 Degrees F

197 Degrees F (PMCC)

ASTM D-1298 ASTM D-2983 ASTM D-1177

ASTM D-93

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

SECTION 10 STABLILITY AND REACTIVITY

INCOMPATIBILITY: Avoid contact with strong oxidizers (eg. chlorine, peroxides, chromates, nitric acid, perchlorates, concentrated oxygen, permanganates) which can generate heat, fires, explosions and the release of toxic fumes.

THERMAL DECOMPOSITION PRODUCTS: In the event of combustion CO, CO2 may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment.

SECTION 11 TOXICOLOGICAL INFORMATION

TOXICITY STUDIES: No toxicity studies have been conducted on this product.

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

SECTION 12 ECOLOGICAL INFORMATION

BIOCHEMICAL OXYGEN DEMAND (5-day BOD): 382,000 ppm

CHEMICAL OXYGEN DEMAND (COD): 2,220,000 ppm

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AQUATIC DATA:

Results below are based on the product.

- 96 hour static acute LC50 to Fathead Minnow = 440 mg/L
- $96~{
 m hour}$ no observed effect concentration is $220~{
 m mg/L}$ based on no mortality or abnormal effects.
- 96 hour static acute LC50 to Rainbow Trout = 310 mg/L
- 96 hour no observed effect concentration is Less than 78 mg/L based on no mortality or abnormal effects.
- 48 hour static acute EC50 to Daphnia magna = 130 mg/L
- $48\ \text{hour}$ no observed effect concentration $16\ \text{mg/L}$ is based on no mortality or abnormal effects.
- 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: LOW. Based on Nalco's recommended product application and the product's characteristics, the potential environmental exposure is: HIGH.

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 liquid waste, it should be solidified with stabilizing agents (such as sand, fly ash, or cement) so that no free liquid remains before disposal to an industrial waste landfill. A non-hazardous liquid waste can also be incinerated in accordance with local, state and federal regulations.

SECTION 14 TRANSPORTATION INFORMATION

PROPER SHIPPING NAME/HAZARD CLASS MAY VARY BY PACKAGING, PROPERTIES, AND MODE OF TRANSPORTATION. THIS PRODUCT IS REGULATED IN THE U.S. ONLY WHEN SHIPPED IN CONTAINERS EXCEEDING 119 GALLONS OR 882 POUNDS CAPACITY OR WHEN THE PACKAGE EXCEEDS THE REPORTABLE QUANTITY. TYPICAL PROPER SHIPPING NAMES FOR THIS PRODUCT ARE:

ALL TRANSPORTATION MODES : COMBUSTIBLE LIQUID, N.O.S. (UNLESS SPECIFIED BELOW)

AIR TRANSPORTATION : PRODUCT IS NOT REGULATED (IATA/ICAO) DURING TRANSPORTATION

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MARINE TRANSPORTATION : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

(IMDG/IMO)

: NA 1993

UN/ID NO HAZARD CLASS - PRIMARY

: 3 - COMBUSTIBLE LIQUID

PACKING GROUP

: III

IMDG PAGE NO

IMDG PAGE NO : N/A
IATA PACKING INSTRUCTION : CARGO: N/A
IATA CARGO AIRCRAFT LIMIT : NO LIMIT

(MAX NET QUANTITY PER PACKAGE)

91.6 C

TECHNICAL NAME(S) : 197 F

RO LBS (PER PACKAGE)

: PETROLEUM HYDROCARBON : NONE : NONE

RQ COMPONENT(S)

SECTION 15 REGULATORY INFORMATION

The following regulations apply to this product.

FEDERAL REGULATIONS:

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200: Based on our hazard evaluation, the following ingredients in this product are hazardous and the reasons are shown below.

n-Decanol - Combustible, eye irritant

n-Octanol - Combustible, eye irritant

Hydrotreated light distillate - Skin irritant, combustible Straight run middle distillate - Skin irritant

Hydrotreated light distillate (oil mist) = TWA 5 mg/m3 ACGIH/TLV

Paraffin wax (fume) = TWA 2 mg/m3 ACGIH/TLV

Straight run middle distillates (oil mist) = TWA 5 mg/m3 ACGIH/TLV

Hydrotreated light distillate (oil mist) = TWA 5 mg/m3

STEL 10 mg/m3 OSHA/PEL

Straight run middle distillate (oil mist) = TWA 5 mg/m3

STEL 10 mg/m3 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

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-- Delayed (chronic) health hazard

XX 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.

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

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 contains the following ingredients covered by the Clean Air Act:

n-Decanol - Section 111

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:

This product does not contain any chemicals which require warning under California Proposition 65.

MICHIGAN CRITICAL MATERIALS:

This product does not contain ingredients listed on the Michigan Critical Materials Register.

STATE RIGHT TO KNOW LAWS:

This product does not contain ingredients listed by State Right To Know Laws.

INTERNATIONAL REGULATIONS:

All components in this product are either on the Domestic Substance list, have been notified under Section 26 of CEPA, or are exempt.

This is a WHMIS controlled product under The House of Commons of Canada Bill C-70 (Class D2B and Class B3). The product contains the following substance(s), from the Ingredient Disclosure List or has been evaluated based on its toxicological properties, to contain the following hazardous ingredient(s):

Chemical Name

CAS # % Concentration Range

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n-Decanol	112-30-1	1-5
n-Octanol	111-87-5	5-10
Paraffin wax	8002-74-2	0-1
Hydrotreated light distillate	64742-47-8	10-20
Straight run middle distillate	64741-44-2	40-70

SECTION 16 OTHER INFORMATION

Nalco internal number F102280

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: MODERATE.
- * 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

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of Health and Human Services, Public Health Service.

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.

PREPARED BY: William S. Utley, PhD., DABT, Manager, Product Safety DATE CHANGED: 12/17/1997 DATE PRINTED: 03/28/1999