

PRODUCT

ControlBrom® CB70

EMERGENCY TELEPHONE NUMBER(S) (800) 424-9300 (24 Hours) CHEMTREC

(800) 424-9300 (24 HOURS) CHEWITKE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : ControlBrom® CB70

COMPANY IDENTIFICATION : Nalco Company

1601 W. Diehl Road Naperville, Illinois 60563-1198

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NFPA 704M/HMIS RATING

HEALTH: 1/2 FLAMMABILITY: 0/0 INSTABILITY: 0/0 OTHER: 0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme * = Chronic Health Hazard

2. COMPOSITION/INFORMATION ON INGREDIENTS

Our hazard evaluation has identified the following chemical substance(s) as hazardous. Consult Section 15 for the nature of the hazard(s).

Hazardous Substance(s)

CAS NO
% (w/w)

Sodium Bromide 7647-15-6 10.0 - 30.0

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

CAUTION

HARMFUL IF SWALLOWED. HARMFUL IF ABSORBED THROUGH SKIN. CAUSES MODERATE EYE IRRITATION. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse

Do not take internally. Use with adequate ventilation. In Keeping with good hygiene practices, avoid eye and prolonged skin contact. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Wear suitable protective equipment. If in contact with skin or eyes, flush affected areas with running water. If irritation persists, obtain medical attention. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing.

Not flammable or combustible. May evolve oxides of sulfur (SOx) under fire conditions.

PRIMARY ROUTES OF EXPOSURE:

Eye, Skin



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HUMAN HEALTH HAZARDS - ACUTE:

EYE CONTACT:

Can cause moderate irritation.

SKIN CONTACT:

Harmful if absorbed through skin.

INGESTION:

Not a likely route of exposure. Harmful if swallowed. Can cause central nervous system depression, nausea, dizziness, vomiting, or unconsciousness.

INHALATION:

Not a likely route of exposure. Repeated or prolonged exposure may irritate the respiratory tract.

HUMAN HEALTH HAZARDS - CHRONIC:

No adverse effects expected other than those mentioned above.

4. FIRST AID MEASURES

EYE CONTACT:

Immediately flush eye with water for at least 15 minutes while holding eyelids open. Get immediate medical attention.

SKIN CONTACT:

Immediately flush with plenty of water for at least 15 minutes. Remove contaminated clothing. Wash clothing before reuse. Get medical attention.

INGESTION:

Get medical attention. Do not induce vomiting without medical advice. Do not give anything to drink.

INHALATION:

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.

NOTE TO PHYSICIAN:

Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

FLASH POINT: Not applicable

Will not burn: inorganic or water-based product

EXTINGUISHING MEDIA:

Not expected to burn. Use extinguishing media appropriate for surrounding fire.



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FIRE AND EXPLOSION HAZARD:

Not flammable or combustible. May evolve oxides of sulfur (SOx) under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING:

In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Restrict access to area as appropriate until clean-up operations are complete. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Stop or reduce any leaks if it is safe to do so. Keep people away from and upwind of spill/leak. Ventilate spill area if possible.

METHODS FOR CLEANING UP:

SMALL SPILLS: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. LARGE SPILLS: Contain liquid using absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Clean contaminated surfaces with water or aqueous cleaning agents. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).

ENVIRONMENTAL PRECAUTIONS:

Do not contaminate surface water., If drains, streams, soil or sewers become contaminated, notify local authority.

7. HANDLING AND STORAGE

HANDLING:

Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Do not breathe vapors/gases/dust. Keep the containers closed when not in use. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Ensure all containers are labeled. Avoid contamination of food and foodstuffs.

STORAGE CONDITIONS:

Store in suitable labeled containers. Store the containers tightly closed. Store separately from acids. Store in a cool well ventilated area away from direct sunlight.

SUITABLE CONSTRUCTION MATERIAL:

Stainless Steel 304, Neoprene, Buna-N, Polyurethane, EPDM, Polypropylene (rigid), Polyethylene (rigid), CPVC (rigid), Plasite 4300, Plasite 7122, 100% phenolic resin liner, Epoxy phenolic resin, Chlorosulfonated polyethylene rubber, Fluoroelastomer, Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use.

UNSUITABLE CONSTRUCTION MATERIAL:

Brass



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS:

This product does not contain any substance that has an established exposure limit.

ENGINEERING MEASURES:

General ventilation is recommended. Use local exhaust ventilation if necessary to control airborne mist and vapor.

RESPIRATORY PROTECTION:

Where concentrations in air may exceed the limits given in this section, the use of a half face filter mask or air supplied breathing apparatus is recommended. A suitable filter material depends on the amount and type of chemicals being handled. Consider the use of filter type: Organic vapor cartridge. with a Particulate pre-filter. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

HAND PROTECTION:

When handling this product, the use of chemical gloves is recommended. The choice of work glove depends on work conditions and what chemicals are handled. Please contact the PPE manufacturer for advice on what type of glove material may be suitable. Gloves should be replaced immediately if signs of degradation are observed.

SKIN PROTECTION:

Wear standard protective clothing.

EYE PROTECTION:

Wear safety glasses with side-shields.

HYGIENE RECOMMENDATIONS:

Use good work and personal hygiene practices to avoid exposure. Keep an eye wash fountain available. Keep a safety shower available. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse. Always wash thoroughly after handling chemicals. When handling this product never eat, drink or smoke.

HUMAN EXPOSURE CHARACTERIZATION:

Based on our recommended product application and personal protective equipment, the potential human exposure is: Low

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE Liquid

APPEARANCE Colorless Clear

ODOR None



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SPECIFIC GRAVITY 1.4 @ 82.4 °F / 28.0 °C

DENSITY 11.6 lb/gal
SOLUBILITY IN WATER Complete
pH (100 %) 10.2 - 12.4
VISCOSITY 5 cps

FREEZING POINT -21 °F / -29 °C

VAPOR PRESSURE 11.5 mm Hg @ 68 °F / 20 °C

VOC CONTENT 0.0 % Calculated

Note: These physical properties are typical values for this product and are subject to change.

10. STABILITY AND REACTIVITY

STABILITY:

Stable under normal conditions.

HAZARDOUS POLYMERIZATION:

Hazardous polymerization will not occur.

CONDITIONS TO AVOID:

Avoid extremes of temperature.

MATERIALS TO AVOID:

Reducing agents Acids Contact with strong acids (e.g. sulfuric, phosphoric, nitric, hydrochloric, chromic, sulfonic) may generate heat, splattering or boiling and toxic vapors. Oxidizing agents Acids Contact with strong acids (e.g. sulfuric, phosphoric, nitric, hydrochloric, chromic, sulfonic) may generate heat, splattering or boiling and toxic vapors.

HAZARDOUS DECOMPOSITION PRODUCTS: Under fire conditions: Oxides of sulfur

11. TOXICOLOGICAL INFORMATION

The following results are for the product.

ACUTE ORAL TOXICITY : Species: Rat

LD50: > 5,000 mg/kg
Test Descriptor: Product

ACUTE DERMAL TOXICITY: Species: Rabbit

LD50: > 5,000 mg/kg

Test Descriptor: Product



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ACUTE INHALATION TOXICITY: Species: Rabbit

LC50: > 2.18 mg/l (4 hrs)

Test Descriptor: Product

PRIMARY SKIN IRRITATION:
Species: Rabbit
Draize Score: 0.0 /8.0
Test Descriptor: Product

PRIMARY EYE IRRITATION:
Species: Rabbit
Draize Score: 7.0 /110.0
Test Descriptor: Product
Species: Rabbit

Result: Essentially non-irritating

Test Descriptor: Product

SENSITIZATION:

The results of testing on guinea pigs showed this material to be non-sensitizing.

CARCINOGENICITY:

None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).

HUMAN HAZARD CHARACTERIZATION:

Based on our hazard characterization, the potential human hazard is: Low

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL EFFECTS:

The following results are for the product.

Acute Fish Results:

| Species | Exposure | Test Type | Value | Test Descriptor |
|----------------|----------|-----------|--------------|-----------------|
| Fathead Minnow | 96 hrs | LC50 | > 5,000 mg/l | Product |

ACUTE INVERTEBRATE RESULTS:

| Species | Exposure | Test Type | Value | Test Descriptor |
|--------------------|----------|-----------|--------------|-----------------|
| Ceriodaphnia dubia | 48 hrs | LC50 | > 5,000 mg/l | Product |

PERSISTENCY AND DEGRADATION:

Chemical Oxygen Demand (COD): 92,000 mg/l



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Greater than 95% of this product consists of inorganic substances for which a biodegradation value is not applicable.

MOBILITY:

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

| Air | Water | Soil/Sediment |
|-----|----------|---------------|
| <5% | 30 - 50% | 30 - 50% |

The portion in water is expected to be soluble or dispersible.

BIOACCUMULATION POTENTIAL

This preparation or material is not expected to bioaccumulate.

ENVIRONMENTAL HAZARD AND EXPOSURE CHARACTERIZATION

Based on our hazard characterization, the potential environmental hazard is: Low

Based on our recommended product application and the product's characteristics, the potential environmental exposure is: Moderate

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

13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it is not a hazardous waste as defined by 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 pesticide waste, consult the FIFRA label for any additional handling, treatment, or disposal requirements. For disposal, contact a properly licensed waste treatment, storage, disposal or recycling facility.

14. TRANSPORT INFORMATION

The information in this section is for reference only and should not take the place of a shipping paper (bill of lading) specific to an order. Please note that the proper Shipping Name / Hazard Class may vary by packaging, properties, and mode of transportation. Typical Proper Shipping Names for this product are as follows.

LAND TRANSPORT:

Proper Shipping Name: PRODUCT IS NOT REGULATED DURING TRANSPORTATION



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AIR TRANSPORT (ICAO/IATA):

Proper Shipping Name: PRODUCT IS NOT REGULATED DURING

TRANSPORTATION

MARINE TRANSPORT (IMDG/IMO):

Proper Shipping Name: PRODUCT IS NOT REGULATED DURING

TRANSPORTATION

15. REGULATORY INFORMATION

This section contains additional information that may have relevance to regulatory compliance. The information in this section is for reference only. It is not exhaustive, and should not be relied upon to take the place of an individualized compliance or hazard assessment. Nalco accepts no liability for the use of this information.

NATIONAL REGULATIONS, USA:

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:

Based on our hazard evaluation, the following substance(s) in this product is/are hazardous and the reason(s) is/are shown below.

Sodium Bromide: Non-Hazardous

CERCLA/SUPERFUND. 40 CFR 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 substances 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 indicated EPA hazard categories:

X 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.



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SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):

This product does not contain substances on the List of Toxic Chemicals.

TOXIC SUBSTANCES CONTROL ACT (TSCA):

This product is exempted under TSCA and regulated under FIFRA. The inerts are on the Inventory List.

NSF NON-FOOD COMPOUNDS REGISTRATION PROGRAM (former USDA List of Proprietary Substances & Non-Food Compounds) :

NSF Registration number for this product is: 143073

This product is acceptable for treatment of cooling and retort water (G5) in and around food processing areas.

FEDERAL INSECTICIDE, FUNGICIDE AND RODENTICIDE ACT (FIFRA) :

EPA Reg. No. 1706-235

In all cases follow instructions on the product label.

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

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 / formerly Sec. 307, 40 CFR 116.4 / formerly Sec. 311 :

This product may contain trace levels (<0.1% for carcinogens, <1% all other substances) of the following substance(s) listed under the regulation. Additional components may be unintentionally present at trace levels.

| Substance(s) | Citations |
|------------------|-----------|
| Sodium Hydroxide | Sec. 311 |

CLEAN AIR ACT, Sec. 112 (Hazardous Air Pollutants, as amended by 40 CFR 63), Sec. 602 (40 CFR 82, Class I and II Ozone Depleting Substances):

Substances listed under this regulation are not intentionally added or expected to be present in this product. Listed components may be present at trace levels.

CALIFORNIA PROPOSITION 65:

Substances listed under California Proposition 65 are not intentionally added or expected to be present in this product.

MICHIGAN CRITICAL MATERIALS:

Substances listed under this regulation are not intentionally added or expected to be present in this product. Listed components may be present at trace levels.

STATE RIGHT TO KNOW LAWS:

Substances listed under this regulation are not intentionally added or expected to be present in this product. Listed components may be present at trace levels.



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INTERNATIONAL CHEMICAL CONTROL LAWS:

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

AUSTRALIA

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

CHINA

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

FUROPE

The substances in this preparation have been reviewed for compliance with the EINECS or ELINCS inventories.

JAPAN

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

KOREA

All substances in this product comply with the Toxic Chemical Control Law (TCCL) and are listed on the Existing Chemicals List (ECL)

NEW ZEALAND

All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996,and are listed on or are exempt from the New Zealand Inventory of Chemicals.

PHILIPPINES

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

16. OTHER INFORMATION

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



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Any use inconsistent with our recommendations may affect the 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.

REFERENCES

Hazardous Substances Data Bank, National Library of Medicine, Bethesda, Maryland (TOMES CPS™ 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. (TOMES CPS™ 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.

Registry of Toxic Effects of Chemical Substances, National Institute for Occupational Safety and Health, Cincinnati, OH

(TOMES CPS™ CD-ROM Version), Micromedex, Inc., Englewood, CO.

The Teratogen Information System, University of Washington, Seattle, WA (TOMES CPS™ CD-ROM Version), Micromedex, Inc., Englewood, CO.

Prepared By: Product Safety Department

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