



# MATERIAL SAFETY DATA SHEET

PRODUCT

NALCOLYTE 8105 COAGULANT

Emergency Telephone Number

Medical (800) 462-5378 (24 hours)

(800) I-M-ALERT

## SECTION 1 PRODUCT IDENTIFICATION

TRADE NAME: NALCOLYTE 8105 COAGULANT

DESCRIPTION: An aqueous solution of a polyquaternary ammonium chloride

NFPA 704M/HMIS RATING: 0/0 HEALTH 1/1 FLAMMABILITY 0/0 REACTIVITY 0 OTHER  
0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

## SECTION 2 HAZARDOUS INGREDIENTS

Our hazard evaluation of the ingredient(s) under OSHA's Hazard Communication Rule, 29 CFR 1910.1200 has found none of the ingredient(s) hazardous.

## SECTION 3 PRECAUTIONARY LABEL INFORMATION

CAUTION: May cause irritation to skin and eyes. Avoid contact with skin, eyes, and clothing. Avoid prolonged or repeated breathing of vapor. Use with adequate ventilation. Do not take internally.

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

## SECTION 4 FIRST AID INFORMATION

EYES: Flush with water for 15 minutes. Call a physician.  
SKIN: Flush with water for 15 minutes.  
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 5 HEALTH EFFECTS INFORMATION

PRIMARY ROUTE(S) OF EXPOSURE: Eye, Skin

EYE CONTACT: May cause irritation with prolonged contact.  
SKIN CONTACT: May cause irritation with prolonged contact.

SYMPTOMS OF EXPOSURE: A review of available data does not identify any symptoms from exposure not previously mentioned.

AGGRAVATION OF EXISTING CONDITIONS: A review of available data does not



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## SECTION 5 HEALTH EFFECTS INFORMATION

( CONTINUED )

identify any worsening of existing conditions.

## SECTION 6 TOXICOLOGY INFORMATION

ACUTE TOXICITY STUDIES: Acute toxicity studies have not been conducted on this product, but acute studies have been conducted on a similar product. The results are shown below.

ACUTE ORAL TOXICITY (ALBINO RATS): LD<sub>50</sub> = Greater than 5,000 mg/kg

ACUTE DERMAL TOXICITY (ALBINO RABBITS): LD<sub>50</sub> = Greater than 2,000 mg/kg

PRIMARY SKIN IRRITATION TEST (ALBINO RABBITS):

SKIN IRRITATION INDEX DRAIZE RATING: 0.1/8.0 Non-irritating

PRIMARY EYE IRRITATION TEST (ALBINO RABBITS):

EYE IRRITATION INDEX DRAIZE RATING: 9.0/110.0 Minimally irritating

COMMENTS: A similar product resulted in some initial conjunctival blistering among 3 of 6 test animals. This disappeared by the end of 7 days.

## SECTION 7 PHYSICAL AND CHEMICAL PROPERTIES

COLOR: Clear, colorless to yellow	FORM: Liquid	ODOR: Slight
DENSITY: 9.5-9.8 lbs/gal.		
SOLUBILITY IN WATER: Completely		
SPECIFIC GRAVITY: 1.14-1.18 @ 77 Degrees F		ASTM D-1298
pH (NEAT) = 7.0-8.5		ASTM E-70
VISCOSITY: 125-400 cps @ 77 Degrees F		ASTM D-2983
FREEZE POINT: 20 Degrees F		ASTM D-1177
BOILING POINT: Greater than 210 Degrees F @ 760 mm Hg		ASTM D-86
FLASH POINT: None		
VOLATILE ORGANIC COMPOUND (VOC): 0.09 lbs/gal.		EPA METHOD 24

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

## SECTION 8 FIRE AND EXPLOSION INFORMATION

FLASH POINT: None

EXTINGUISHING MEDIA: This product would not be expected to burn unless all the water is boiled away. The remaining organics may be ignitable.



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## SECTION 8 FIRE AND EXPLOSION INFORMATION

( CONTINUED )

Use water to cool containers exposed to fire.

UNUSUAL FIRE AND EXPLOSION HAZARD: May evolve NO<sub>x</sub> under fire conditions.

## SECTION 9 REACTIVITY INFORMATION

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, CO<sub>2</sub>, NO<sub>x</sub> may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment.

## SECTION 10 PERSONAL PROTECTION EQUIPMENT

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.

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.

## SECTION 11 SPILL AND DISPOSAL INFORMATION

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



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## SECTION 11 SPILL AND DISPOSAL INFORMATION

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into recovery or salvage drums for disposal. Refer to CERCLA in Section 14.

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 14.

This product is toxic to fish. It should not be directly discharged into lakes, ponds, streams, waterways or public water supplies.

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 12 ENVIRONMENTAL INFORMATION

CHEMICAL OXYGEN DEMAND (COD): 330,000 ppm

TOTAL ORGANIC CARBON (TOC): 160,000 ppm

AQUATIC DATA: Results below are based on the product.

96 hour static acute  $LC_{50}$  to Fathead Minnow = 0.38 mg/L

96 hour no observed effect concentration is 0.25 mg/L based on no mortality or abnormal effects.

TOXICITY RATING: Extremely toxic

7-day chronic static renewal value to Fathead Minnow = 0.40 mg/L

7-day no observed effect concentration is 0.28 mg/L based on no mortality or abnormal effects.

7-day lowest observed concentration is 0.56 mg/L

96 hour static acute  $LC_{50}$  to Rainbow Trout = 0.097 mg/L

96 hour no observed effect concentration is 0.060 mg/L based on no mortality



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## SECTION 12 ENVIRONMENTAL INFORMATION

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or abnormal effects.

TOXICITY RATING: Extremely toxic

48 hour static acute LC<sub>50</sub> to Daphnia magna = 0.7 mg/L

48 hour no observed effect concentration is 0.25 mg/L based on no observed abnormal behavior.

TOXICITY RATING: Extremely toxic

If released into the environment, see CERCLA in Section 14.

## SECTION 13 TRANSPORTATION INFORMATION

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

## SECTION 14 REGULATORY INFORMATION

The following regulations apply to this product.

FEDERAL REGULATIONS:

OSHA'S HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:

Based on our hazard evaluation, none of the ingredients in this product are hazardous.

CERCLA, 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):



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## SECTION 14 REGULATORY INFORMATION

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Our hazard evaluation has found that this product is not hazardous under 29 CFR 1910.1200.

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).

### FOOD AND DRUG ADMINISTRATIONS (FDA) Federal Food, Drug and Cosmetic Act:

When use situations necessitate compliance with FDA regulations, this product is acceptable under 21 CFR 176.170 components of paper and paperboard in contact with aqueous and fatty foods, and under 21 CFR 176.180 components of paper and paperboard in contact with dry food.

### U. S. EPA - OFFICE OF DRINKING WATER - ADDITIVES EVALUATION BRANCH:

The US EPA has approved this product for use as a coagulation aid in the treatment of potable water. The maximum recommended product dosage limit is 20 ppm.

### AMERICAN WATER WORKS ASSOCIATION (AWWA):

This product complies with AWWA Standard B-452.

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 11 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:



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## SECTION 14 REGULATORY INFORMATION

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### CALIFORNIA PROPOSITION 65:

Epichlorohydrin, known to the State of California to cause cancer, is present as an impurity or residue.

### MICHIGAN CRITICAL MATERIALS:

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

### STATE RIGHT TO KNOW LAWS:

The following ingredient(s) are disclosed for compliance with State Right To Know Laws:

Polyquaternary amine chloride	Trade secret
Water	7732-18-5

### INTERNATIONAL REGULATIONS:

This is not a WHMIS controlled product under The House of Commons of Canada Bill C-70.

## SECTION 15 ADDITIONAL INFORMATION

Nalco internal numbers F102415/F100482/3

## SECTION 16 USER'S RESPONSIBILITY

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 ensure safe workplace operations. Please consult your local sales representative for any further information.

## SECTION 17 BIBLIOGRAPHY

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