

SAFETY DATA SHEET

NALCO® 90005

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

| Product name | : | NALCO® 90005 |
|-------------------------------|---|---|
| Other means of identification | : | Not applicable. |
| Restrictions on use | : | Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits. |
| Company | : | Nalco Company 1601 W. Diehl Road Naperville, Illinois 60563-1198 USA TEL: (630)305-1000 |
| Emergency telephone number | : | (800) 424-9300 (24 Hours) CHEMTREC |
| Issuing date | : | 02/09/2015 |

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

| Acute toxicity (Oral) Acute toxicity (Inhalation) Acute toxicity (Dermal) Skin corrosion Serious eye damage/eye irritation | : : : | Category 3 Category 3 Category 4 Category 1B Category 1 |
|---|-------|--|
| GHS Label element | | |
| Hazard pictograms | : | |
| Signal Word | : | Danger |
| Hazard Statements | : | Toxic if swallowed or if inhaled Harmful in contact with skin. Causes severe skin burns and eye damage. |
| Precautionary Statements | : | Prevention: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection. Response: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position |

| NALCO® 90005 | | | |
|---|--|---|--|
| | for seve do. Coni doctor/ p Storage Store in locked u Dispos a | ral minutes. Remove con inue rinsing. Immediated ohysician. Wash contam : a well-ventilated place. I p. al: | EYES: Rinse cautiously with water ntact lenses, if present and easy to ly call a POISON CENTER or inated clothing before reuse. Keep container tightly closed. Store o an approved waste disposal |
| Other hazards | : None kn | own. | |
| Section: 3. COMPOSITION/ | NFORMATIO | N ON INGREDIENTS | |
| Chemical Name Dimethyl-Dioctyl-Ammonium Glycerol | Chloride | CAS-No. 5538-94-3 56-81-5 | Concentration: (%) 50 5 - 10 |
| Section: 4. FIRST AID MEA | SURES | | |
| In case of eye contact In case of skin contact | least 15 r Continue : Wash off Use a mi | ninutes. Remove contact rinsing. Get medical atte immediately with plenty Id soap if available. Was nly clean shoes before re | water, also under the eyelids, for at ct lenses, if present and easy to do. ention immediately. of water for at least 15 minutes. sh clothing before reuse. euse. Get medical attention |
| If swallowed | | by mouth to an unconsc | induce vomiting. Never give ious person. Get medical attention |
| If inhaled | : Remove immediat | | omatically. Get medical attention |
| Protection of first-aiders | not put y | ourself at risk of injury. If | e danger before taking action. Do in doubt, contact emergency ive equipment as required. |
| Notes to physician | : Treat syr | nptomatically. | |
| Most important symptoms and effects, both acute and delayed | : See Sect symptom | | information on health effects and |
| Section: 5. FIREFIGHTING | MEASURES | | |
| Suitable extinguishing media | | guishing measures that | |

| Suitable extinguishing media | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
|--------------------------------------|---|---|
| Unsuitable extinguishing media | : | None known. |
| Specific hazards during firefighting | : | Not flammable or combustible. |

| Hazardous combustion products | Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus |
|---|---|
| Special protective equipment for firefighters | Use personal protective equipment. |
| Specific extinguishing methods | Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes. |

Section: 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protective equipment and emergency procedures | : | Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8. |
|---|----|--|
| Environmental precautions | : | Do not allow contact with soil, surface or ground water. |
| Methods and materials for containment and cleaning up | : | Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Flush away traces with water. |
| Section: 7. HANDLING AND S | ST | ORAGE |
| Advice on safe handling | : | Do not ingest. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only with adequate ventilation. |

Conditions for safe storage : Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

| Suitable material | : | The following compatibility data is suggested based on similar product data and/or industry experience: Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use. |
|---------------------|---|---|
| Unsuitable material | : | not determined |

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Components | CAS-No. | Form of exposure | Permissible concentration | Basis |
|------------|---------|------------------|---------------------------|-------|
| Glycerol | 56-81-5 | TWA | 10 mg/m3 | ACGIH |

Engineering measures

: Effective exhaust ventilation system Maintain air concentrations below occupational exposure standards.

Personal protective equipment

| Eye protection : | Safety goggles Face-shield |
|--------------------------|--|
| Hand protection : | Wear the following personal protective equipment: Standard glove type. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. |
| Skin protection : | Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing |
| Respiratory protection : | When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. |
| Hygiene measures : | Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard. |

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance Colour Odour Flash point | :: | Liquid Clear Colorless - Light yellow Alcoholic > 93.3 °C Method: Seta closed cup |
|--|----|---|
| pН | : | 6.5 - 9.0, 10 % |
| Odour Threshold | : | no data available |
| Melting point/freezing point | : | MELTING POINT: -12 °C |
| Initial boiling point and boiling range | : | 95.0 °C |
| Evaporation rate | : | no data available |
| Flammability (solid, gas) | : | no data available |
| Upper explosion limit | : | no data available |
| Lower explosion limit | : | no data available |
| Vapour pressure | : | no data available |
| Relative vapour density | : | no data available |
| Relative density | : | 0.96 (25.0 °C) |
| Density | : | 8.0 lb/gal |
| Water solubility | : | completely soluble |
| Solubility in other solvents | : | no data available |
| Partition coefficient: n- octanol/water | : | no data available |

| Auto-ignition temperature | : no data available |
|-----------------------------------|---------------------|
| Thermal decomposition temperature | : no data available |
| Viscosity, dynamic | : 100 mPa.s (25 °C) |
| Viscosity, kinematic | : no data available |
| VOC | : 9.0 % |

Section: 10. STABILITY AND REACTIVITY

| Chemical stability | : : | Stable under normal conditions. |
|------------------------------------|------------|---|
| Possibility of hazardous reactions | : 1 | No dangerous reaction known under conditions of normal use. |
| | : | Extremes of temperature |
| Incompatible materials | ı ç | Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors. Reducing agents |
| Hazardous decomposition products | (| Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus |

Section: 11. TOXICOLOGICAL INFORMATION

| Information on likely routes of | : | Inhalation, Eye contact, Skin contact |
|---------------------------------|---|---------------------------------------|
| exposure | | |
| | | |

Potential Health Effects

| Eyes | : | Causes serious eye damage. | |
|--------------------------------|---|--|--|
| Skin | : | Harmful in contact with skin. Causes severe skin burns. | |
| Ingestion | : | Toxic if swallowed. Causes digestive tract burns. | |
| Inhalation | : | Toxic if inhaled. May cause nose, throat, and lung irritation. | |
| Chronic Exposure | : | Health injuries are not known or expected under normal use. | |
| Experience with human exposure | | | |
| Eye contact | : | Redness, Pain, Corrosion | |
| Skin contact | : | Redness, Pain, Corrosion | |
| Ingestion | : | Corrosion, Abdominal pain | |
| Inhalation | : | Respiratory irritation, Cough | |
| Toxicity | | | |
| Product | | | |

| : | no data available |
|---|--|
| : | no data available |
| : | no data available |
| : | Species: Rabbit |
| : | Species: rabbit |
| : | no data available |
| | |
| : | No evidence of developmental or fetotoxic effects observed at exposure doses ranging from 10 to 50 mg/kg/day from day 6 through 15 of gestation. |
| : | no data available |
| : | no data available |
| : | no data available |
| | |
| : | Dimethyl-Dioctyl-Ammonium Chloride LD50 rat: 238 mg/kg |
| | Glycerol LD50 rat: 18,300 mg/kg |
| | |
| : | Dimethyl-Dioctyl-Ammonium Chloride LC50 rat: 0.07 mg/l Exposure time: 4 h |
| | |
| : | Dimethyl-Dioctyl-Ammonium Chloride LD50 rabbit: 2,930 mg/kg |
| | Glycerol LD50 rabbit: 23,000 mg/kg |
| | |

Section: 12. ECOLOGICAL INFORMATION

| Environmental Effects | : | Very toxic to aquatic life. | | |
|---|---|--|--|--|
| Product | | | | |
| Toxicity to fish | : | LC50 Rainbow Trout: 0.7 mg/l Exposure time: 96 hrs Test substance: Product | | |
| | | LC50 Bluegill Sunfish: 0.1 mg/l Exposure time: 48 hrs Test substance: Product | | |
| Toxicity to daphnia and other aquatic invertebrates | : | LC50 Daphnia magna: 0.1 mg/l Exposure time: 48 hrs Test substance: Product | | |
| Toxicity to terrestrial organisms | : | LC50 Mallard Duck: 240 mg/kg Test substance: Product | | |
| | | LC50 Bobwhite Quail: 2,625 mg/kg Exposure time: 8 Days Test substance: Product | | |

Persistence and degradability

Total Organic Carbon (TOC): 410,000 mg/l

Chemical Oxygen Demand (COD): 1,100,000 mg/l

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 | : <5% | |
|-------|------------|--|
| Water | : 10 - 30% | |
| Soil | : 10 - 30% | |

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

Bioaccumulative potential

This preparation or material is not expected to bioaccumulate.

Other information

no data available

Section: 13. DISPOSAL CONSIDERATIONS

Disposal methods

: The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to

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|-------------------------|---|
| | disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility. |
| Disposal considerations | : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. |

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

| Proper shipping name Technical name(s) UN/ID No. Transport hazard class(es) Packing group | DISINFECTANTS, LIQUID, CORROSIVE, N.O.S QUATERNARY AMMONIUM CHLORIDE(S) UN 1903 8 II | |
|---|---|--|
| Air transport (IATA) | | |
| Proper shipping name Technical name(s) UN/ID No. Transport hazard class(es) Packing group | DISINFECTANTS, LIQUID, CORROSIVE, N.O.S. QUATERNARY AMMONIUM CHLORIDE(S) UN 1903 8 II | |
| Sea transport (IMDG/IMO) | | |
| Proper shipping name Technical name(s) UN/ID No. Transport hazard class(es) Packing group | DISINFECTANTS, LIQUID, CORROSIVE, N.O.S. QUATERNARY AMMONIUM CHLORIDE(S) UN 1903 8 II | |

Section: 15. REGULATORY INFORMATION

EPA Reg. No.

: 6836-60-1706

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

| SARA 311/312 Hazards | : | Acute Health Hazard |
|----------------------|---|---|
| SARA 302 | : | No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. |
| SARA 313 | : | This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. |

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL CHEMICAL CONTROL LAWS :

TOXIC SUBSTANCES CONTROL ACT (TSCA)

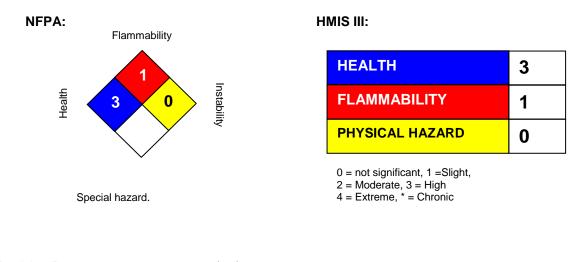
This product is exempted under TSCA and regulated under FIFRA. The inerts are on the Inventory List.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) The substances in this preparation are listed on the Domestic Substances List (DSL), are exempt, or have been reported in accordance with the New Substances Notification Regulations.

EUROPE

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

Section: 16. OTHER INFORMATION



| Revision Date | : | 02/09/2015 |
|----------------|---|--------------------|
| Version Number | : | 1.0 |
| Prepared By | : | Regulatory Affairs |

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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