NALCO Water
An Ecolab Company

# SAFETY DATA SHEET

## CT 603SO

## Section: 1. PRODUCT AND COMPANY IDENTIFICATION

| | | |
|---|---|---|
| Product name | : | CT 603SO |
| Other means of identification | : | Not applicable. |
| Recommended use | : | SCALE CONTROL |
| Restrictions on use | : | Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits. |
| Company | : | Nalco Company<br>1601 W. Diehl Road<br>Naperville, Illinois 60563-1198<br>USA<br>TEL: (630) 305-1000 |
| Emergency telephone number | : | (800) 424-9300 (24 Hours) CHEMTREC |
| Issuing date | : | 08/09/2024 |

## Section: 2. HAZARDS IDENTIFICATION

### GHS Classification

| | | |
|---|---|---|
| Corrosive to metals | : | Category 1 |
| Skin corrosion | : | Category 1 |
| Serious eye damage | : | Category 1 |
| Skin sensitization | : | Category 1 |

### GHS Label element

Hazard pictograms :

Signal Word : Danger

Hazard Statements : May be corrosive to metals.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.

Precautionary Statements : **Prevention:**
Avoid breathing mist or vapours. Wash skin thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ face protection.
**Response:**
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. If

skin irritation or rash occurs: Get medical advice/ attention.
**Storage:**
Protect product from freezing.
**Disposal:**
Dispose of contents/ container to an approved waste disposal plant.

**Other hazards** : Do not mix with bleach or other chlorinated products – will cause chlorine gas.

## Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

| Chemical Name | CAS-No. | Concentration: (%) |
|---|---|---|
| Polycarboxylic acid polymer | Proprietary | 30 - 60 |
| Maleic Acid | 110-16-7 | 10 - 30 |
| Carboxylic acid | Proprietary | 1 - 5 |
| Methylphenyl Methyl Butanedioic Acid | Proprietary | 1 - 5 |

## Section: 4. FIRST AID MEASURES

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.

Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.

Notes to physician : Treat symptomatically.

Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

## Section: 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : None known.

Specific hazards during : Not flammable or combustible.

firefighting

| | | |
|---|---|---|
| Hazardous combustion products | : | Decomposition products may include the following materials: Carbon oxides |
| 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. |

## Section: 7. HANDLING AND STORAGE

| | | |
|---|---|---|
| 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. Do not mix with bleach or other chlorinated products – will cause chlorine gas. |
| Conditions for safe storage | : | Keep away from strong bases. Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers. Protect product from freezing. |
| Suitable material | : | Keep in properly labelled containers. |
| Unsuitable material | : | The following compatibility data is suggested based on similar product data and/or industry experience: Product is corrosive to aluminum. Aluminum should not be used for feed, storage, or transportation systems., Carbon steel |

## Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

| | | |
|---|---|---|
| Engineering measures | : | Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards. |

**Personal protective equipment**

| | | |
|---|---|---|
| Eye protection | : | Safety goggles<br>Face-shield |
| Hand protection | : | Wear the following personal protective equipment:<br>Standard glove type.<br>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. |

The Personal Protective Equipment (PPE) recommendations provided above have been made in good faith based on typical expected conditions of use. PPE selection should always be completed in conjunction with a proper risk assessment and in accordance with a PPE management program.

## Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|---|
| Appearance | : | Liquid |
| Colour | : | Amber |
| Odour | : | Slight |
| Flash point | : | does not flash |
| pH | : | < 2,(100 %) |
| Odour Threshold | : | no data available |
| Melting point/freezing point | : | Freezing Point: < -5 °C |
| Initial boiling point and boiling range | : | 102 °C |
| Evaporation rate | : | similar to water |
| Flammability (solid, gas) | : | Not applicable. |
| Upper explosion limit | : | no data available |
| Lower explosion limit | : | no data available |
| Vapour pressure | : | 17.5 mm Hg, (20 °C), |
| Relative vapour density | : | no data available |
| Relative density | : | 1.165 - 1.185, (20 °C), |
| Density | : | no data available |
| Water solubility | : | no data available |
| Solubility in other solvents | : | no data available |

| | | |
|---|---|---|
| Partition coefficient: n-octanol/water | : | no data available |
| Auto-ignition temperature | : | no data available |
| Thermal decomposition | : | no data available |
| Viscosity, dynamic | : | no data available |
| Viscosity, kinematic | : | 10 - 25 mm2/s (25 °C) |
| Molecular weight | : | no data available |
| VOC | : | no data available |

## Section: 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | No dangerous reaction known under conditions of normal use. |
| Chemical stability | : | Stable under normal conditions. |
| Possibility of hazardous reactions | : | Do not mix with bleach or other chlorinated products – will cause chlorine gas. |
| Conditions to avoid | : | Freezing temperatures. |
| Incompatible materials | : | Contact with strong alkalies (e.g. ammonia and its solutions, carbonates, sodium hydroxide (caustic), potassium hydroxide, calcium hydroxide (lime), cyanide, sulfide, hypochlorites, chlorites) may generate heat, splattering or boiling and toxic vapors.<br>Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors.<br>Cyanides<br>Reducing agents |
| Hazardous decomposition products | : | In case of fire, hazardous decomposition products may be produced such as:<br>Carbon oxides |

## Section: 11. TOXICOLOGICAL INFORMATION

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

**Potential Health Effects**

| | | |
|---|---|---|
| Eyes | : | Causes serious eye damage. |
| Skin | : | Causes severe skin burns. May cause allergic skin reaction. |
| Ingestion | : | Causes digestive tract burns. |
| Inhalation | : | 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, Irritation, Corrosion, Allergic reactions |
| Ingestion | : | Corrosion, Abdominal pain |
| Inhalation | : | Respiratory irritation, Cough |

**Toxicity**

**Product**

| | | |
|---|---|---|
| Acute oral toxicity | : | rat: 3,870 mg/kg<br>Test substance: Product<br><br>Acute toxicity estimate: 4,090 mg/kg |
| Acute inhalation toxicity | : | no data available |
| Acute dermal toxicity | : | Acute toxicity estimate: > 5,000 mg/kg |
| Skin corrosion/irritation | : | no data available |
| Serious eye damage/eye irritation | : | no data available |
| Respiratory or skin sensitization | : | no data available |
| Carcinogenicity | : | no data available |
| Reproductive effects | : | No reproductive toxic effects expected. |
| Germ cell mutagenicity | : | Contains no ingredient listed as a mutagen |
| Teratogenicity | : | no data available |
| STOT - single exposure | : | no data available |
| STOT - repeated exposure | : | no data available |
| Aspiration toxicity | : | no data available |

## Section: 12. ECOLOGICAL INFORMATION

**Toxicity**

| | | |
|---|---|---|
| Environmental Effects | : | This product has no known ecotoxicological effects. |

**Product**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 Bluegill Sunfish: > 1,000 mg/l<br>Exposure time: 96 hrs<br>Test substance: pH Adjusted Product<br><br>LC50 Rainbow Trout: > 1,000 mg/l<br>Exposure time: 96 hrs<br>Test substance: pH Adjusted Product |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 Daphnia magna: > 1,000 mg/l<br>Exposure time: 48 h |

Test substance: pH Adjusted Product

LC50 Crangon crangon (shrimp): 2,160 mg/l
Exposure time: 96 h
Test substance: pH Adjusted Product

**Components**

Toxicity to algae : Maleic Acid
EC50 Pseudokirchneriella subcapitata (algae): 74.35 mg/l
Exposure time: 72 h

**Persistence and degradability**

Biodegradability : Result: no data available

**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 : 70 - 90%

**Bioaccumulative potential**

no data available

**Other information**

no data available

## Section: 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it could meet the criteria of a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Before disposal, it should be determined if the waste meets the criteria of a hazardous waste.

Hazardous Waste: : D002

Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of contents/container in accordance 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.

The presence of an RQ component (Reportable Quantity for U.S. DOT) in this product causes it to be regulated with an additional description of RQ for road, or as Environmentally hazardous for road and air, ONLY when the net weight in the package exceeds the calculated RQ for the product.

**Land transport (DOT)**

| | | |
|---|---|---|
| Proper shipping name | : | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. |
| Technical name(s) | : | MALEIC ANHYDRIDE, POLYMER |
| UN/ID No. | : | UN 3265 |
| Transport hazard class(es) | : | 8 |
| Packing group | : | III |
| Reportable Quantity (per package) | : | 50,000 lbs |
| RQ Component | : | MALEIC ACID |

**Air transport (IATA)**

| | | |
|---|---|---|
| Proper shipping name | : | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. |
| Technical name(s) | : | MALEIC ANHYDRIDE, POLYMER |
| UN/ID No. | : | UN 3265 |
| Transport hazard class(es) | : | 8 |
| Packing group | : | III |
| Reportable Quantity (per package) | : | 50,000 lbs |
| RQ Component | : | MALEIC ACID |

**Sea transport (IMDG/IMO)**

| | | |
|---|---|---|
| Proper shipping name | : | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. |
| Technical name(s) | : | MALEIC ANHYDRIDE, POLYMER |
| UN/ID No. | : | UN 3265 |
| Transport hazard class(es) | : | 8 |
| Packing group | : | III |

## Section: 15. REGULATORY INFORMATION

**TSCA list** : No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

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

**CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| Maleic Acid | 110-16-7 | 5000 | 50000 |

**SARA 304 Extremely Hazardous Substances Reportable Quantity**
This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Corrosive to metals
Respiratory or skin sensitisation
Skin corrosion or irritation
Serious eye damage or eye irritation

**SARA 302** : This material does not contain any components with a section 302 EHS TPQ.

**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** :

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

**United States TSCA Inventory**
On or in compliance with the active portion of the TSCA inventory

**Japan. ENCS - Existing and New Chemical Substances Inventory**
This product contains substance(s) which are not in compliance with the Law Regulating the Manufacture and Importation Of Chemical Substances and are not listed on the Existing and New Chemical Substances list (ENCS).

**Korea. Korean Existing Chemicals Inventory (KECI)**
On the Korea Existing Chemicals Inventory.

**Australia. Australian Industrial Chemicals Introduction Scheme (AICIS)**
On the inventory, or in compliance with the inventory.

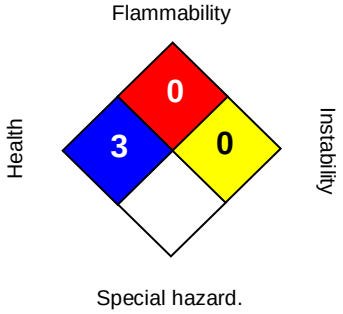
**Philippines Inventory of Chemicals and Chemical Substances (PICCS)**
All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

**China Inventory of Existing Chemical Substances**
This product contains substance(s) which are not in compliance with the Provisions on the Environmental Administration of New Chemical Substances and may require additional review.

**Taiwan Chemical Substance Inventory**
not determined

## Section: 16. OTHER INFORMATION

**NFPA:**




**HMIS III:**

| | |
|---|---|
| **HEALTH** | **3*** |
| **FLAMMABILITY** | **0** |
| **PHYSICAL HAZARD** | **0** |

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

| | | |
|---|---|---|
| Revision Date | : | 08/09/2024 |
| Version Number | : | 2.0 |
| 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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