

SAFETY DATA SHEET**1. IDENTIFICATION**

Product Name: **AEROSOL® OT-70 PG Surfactant**
Product Description: Sodium dioctyl sulfosuccinate in mixture of propylene glycol and water
Synonyms: None
Chemical Family: Ester
Molecular Formula: C₂₀H₃₇O₇NaS
Molecular Weight: 444
Intended/Recommended Use: Surfactant

CYTEC INDUSTRIES INC., FIVE GARRET MOUNTAIN PLAZA, WOODLAND PARK, NEW JERSEY 07424, USA
For Product and all Non-Emergency Information call 1-800/652-6013. Outside the USA and Canada call 1-973/357-3193.

EMERGENCY PHONE (24 hours/day) - For emergency only involving spill, leak, fire, exposure or accident call:

Asia Pacific:

Australia - +61-3-9663-2130 or 1800-033-111 (IXOM)
China (PRC) - +86 0532 83889090 (NRCC)
New Guinea - +61-3-9663-2130 or 1800-033-111
New Zealand - +61-3-9663-2130 or 0800-734-607 (IXOM)
India, Japan, Korea, Malaysia, Thailand - +65 3158 1074 (Carechem24 Singapore)
India (Hindi Speaking Only) - +65 3158 1198 or 000800 100 7479 (Carechem24 Singapore)

Canada: +1-905-356-8310 (Cytec Welland, Canada plant)

Europe/Africa/Middle East (Carechem24 UK):

Europe, Middle East, Africa, Israel - +44 (0) 1235 239 670
(Arabic speaking countries) - +44 (0) 1235 239 671

Latin America:

Brazil - 0800 7077 022 (SUATRANS)
Chile - +56-2-2-247-3600 (CITUC QUIMICO)
All Others - +52-376-73 74122 (Cytec Atequiza, Mexico plant)

USA: +1-703-527-3887 or 1-800-424-9300 (CHEMTREC #CCN6083)

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2. HAZARDS IDENTIFICATION**GHS Classification**

Skin Corrosion / Irritation Hazard Category 2
Serious Eye Damage / Eye Irritation Hazard Category 1
Aquatic Environment Acute Hazard Category 3

LABEL ELEMENTS

Signal Word

Danger

Hazard Statements

Causes skin irritation

Causes serious eye damage

Harmful to aquatic life

Precautionary Statements

Wash face, hands and any exposed skin thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

Avoid release to the environment.

IF ON SKIN: Wash with plenty of soap and water.

Specific treatment (see supplemental first aid instructions on this label).

Take off all contaminated clothing and wash it before reuse.

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.

Dispose of contents/container in accordance with local and national regulations.

Hazards Not Otherwise Classified (HNOC), Other Hazards

Spills are very slippery.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance, Mixture or Article? Mixture

HAZARDOUS INGREDIENTS

Component / CAS No.	%	GHS Classification	Carcinogen
Sodium dioctyl sulfosuccinate 577-11-7	68 - 72	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Acute 3 (H402)	-

The specific chemical identity and/or exact percentage of composition for one or more ingredients has been withheld as a trade secret.

Additional GHS classification or other information may be included in this section but has not been adopted by OSHA. See Section 16 for full text of H phrases.

4. FIRST AID MEASURES**DESCRIPTION OF FIRST AID MEASURES****Eye Contact:**

Rinse immediately with plenty of water for at least 15 minutes. Obtain medical advice if there are persistent symptoms.

Skin Contact:

Remove contaminated clothing and shoes without delay. Wash immediately with plenty of water. Do not reuse contaminated clothing without laundering. Get medical attention if pain or irritation persists after washing or if signs and symptoms of overexposure appear.

Ingestion:

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

Inhalation:

Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

None known

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDS

Not applicable

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Use water spray or fog, carbon dioxide or dry chemical.

Extinguishing Media to Avoid:

full water jet.

Protective Equipment:

Firefighters, and others exposed, wear self-contained breathing apparatus. Wear full firefighting protective clothing. See MSDS Section 8 (Exposure Controls/Personal Protection).

Special Hazards:

Keep containers cool by spraying with water if exposed to fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Where exposure level is not known, wear approved, positive pressure, self-contained respirator. Where exposure level is known, wear approved respirator suitable for level of exposure. In addition to the protective clothing/equipment in Section 8 (Exposure Controls/Personal Protection), wear impermeable boots.

Methods For Cleaning Up:

Product may cause a slip hazard. Spilled material should be absorbed onto an inert material and scooped up. Flush spill area with water. If slipperiness remains apply more dry-sweeping compound.

References to other sections:

See Sections 8 and 13 for additional information.

7. HANDLING AND STORAGE

HANDLING

Precautions: Wash hands thoroughly after handling. Avoid release to the environment. Wear protective gloves and eye/face protection.

Special Handling Statements: None

STORAGE

To avoid product degradation and equipment corrosion, do not use iron, copper or aluminum containers or equipment.

Storage Temperature: Room temperature

Reason: Quality.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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Engineering Measures:

Utilize a closed system process where feasible. Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure.

Respiratory Protection:

Where exposures are below the established exposure limit, no respiratory protection is required. Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure.

Eye Protection:

Prevent eye and skin contact. Provide eye wash fountain and safety shower in close proximity to points of potential exposure. Wear eye/face protection such as chemical splash proof goggles or face shield.

Skin Protection:

Prevent contamination of skin or clothing when removing protective equipment. Wear impermeable gloves and suitable protective clothing.

Hand Protection:

Nitrile or fluorinated rubber gloves. Consider the porosity and elasticity data of the glove manufacturer and the specific conditions in the work place. Replace gloves immediately when torn or any change in appearance (dimension, colour, flexibility etc) is noticed. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

Additional Advice:

Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water.

Exposure Limit(s)

The below constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

No values have been established.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	water-white
Appearance:	viscous liquid
Odor:	soap-like
Boiling Point:	Not available
Melting Point:	Gels below 0 C
Vapor Pressure:	Not available
Specific Gravity/Density:	~1.10
Vapor Density:	Not available
Percent Volatile (% by wt.):	~24 - 26
pH:	5 - 7 (1% aqueous solution)
Saturation In Air (% By Vol.):	Not available
Evaporation Rate:	Not available
Solubility In Water:	1.5% @ 25 °C Slight
Volatile Organic Content:	Not available
Flash Point:	>93 °C 200 °F Setaflash Closed Cup
Flammability (solid, gas):	Not available
Flammable Limits (% By Vol):	Not applicable
Autoignition (Self) Temperature:	Not available
Decomposition Temperature:	Not available
Partition coefficient (n-octanol/water):	Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

Odor Threshold: Not available

Viscosity (Kinematic): Not available

DUST HAZARD INFORMATION

Particle Size (microns):	Not applicable
Kst (bar-m/sec):	Not applicable
Maximum Explosion Pressure (Pmax):	Not applicable
Dust Class:	Not applicable
Minimum Ignition Energy (MIE) (mJ):	Not applicable
Minimum Ignition Temperature (MIT) (°C):	Not applicable
Minimum Explosive Concentration (MEC) (g/m³):	Not applicable
Limiting Oxygen Concentration (LOC) (%):	Not applicable

10. STABILITY AND REACTIVITY

Stability: Stable

Conditions To Avoid: None known

Polymerization: Will not occur

Conditions To Avoid: None known

Materials To Avoid: Strong oxidizing agents, strong acids, and alkalies.

Hazardous Decomposition Products: Carbon dioxide
Carbon monoxide (CO)
Oxides of sulfur (includes sulfur di and tri oxides)

11. TOXICOLOGICAL INFORMATION

PRODUCT TOXICITY INFORMATION

Likely Routes of Exposure: Oral, Eyes, Skin.

ACUTE TOXICITY DATA

oral	rat	Acute LD50	>2000 mg/kg
dermal	rabbit	Acute LD50	>2000 mg/kg
inhalation	rat	Acute LC50 4 hr	>5 mg/l (Dust/Mist)

LOCAL EFFECTS ON SKIN AND EYE

Acute Irritation	skin	Irritating
Acute Irritation	eye	Causes serious damage

ALLERGIC SENSITIZATION

Sensitization	skin	Not sensitizing
Sensitization	respiratory	No data

GENOTOXICITY

Assays for Gene Mutations

Ames Salmonella Assay No data

HAZARDOUS INGREDIENT TOXICITY DATA

Sodium dioctyl sulfosuccinate (DSS) has an average oral (rat) LD50 >2000 mg/kg based on multiple test values. The dermal (rabbit) LD50 is >10 g/kg. DSS has caused skin and eye irritation in animals, to varying extents, depending on the formulation of the tested material (e.g. solid vs. solution), the tested concentration, and the exposure duration. Following 24-hour dermal application (rabbits) of 8 - 10 g/kg solid DSS, the only effect observed was mild erythema. In other rabbit skin irritation tests, the primary irritation score for 100% DSS was ~ 4 and that for 80% DSS with propylene glycol was ~3, both resulting in a moderate irritant classification. In another study, a volume of 0.5 mL Docusate sodium (70% solution in ethanol/methanol and water) was applied on 6 cm² shaved skin of 3 male rabbits by occlusive application. After this period, the skin area was washed with warm water and observed after 1, 24, 48, 72 hours and 6, 8, 10 and 14 days. The results showed that there was an irritation index of 7.8/8 over the 1 -72 hour period and some effects were still visible at 14 days. In rabbits, a concentration of 1% was the lowest reported effective dose necessary to produce slight dermal erythema and at concentrations from 5 - 25% moderate dermal irritation occurred. Solid DSS applied to the eyes of rabbits produced moderate irritation. Mild eye irritation in rabbits occurred following treatment with concentrations between 0.1 and 0.5% DSS. In one study, a volume of 0.1 mL Docusate sodium (mixture of 70% docusate sodium, ethanol in methanol, water) was applied to the eyes of 3 male rabbits. After 72 hours, fluorescein solution was applied for cornea evaluation and rinsing was performed with warm physiological solution. Evaluation after 1, 24, 48 and 72 hours and 6, 8, 10, 13, 17 and 21 days after application showed severe eye irritation and irreversible damage (including turbidity of the cornea). The mean overall irritation score for 1 -72 hours was 46,67/110. Humans appear to be less sensitive to DSS for skin irritation. In humans, a concentration of 1% was the highest no-effect level observed for skin irritation following a 24-hr patch test. In a modified Draize-Shelanski repeat-insult patch test, DSS showed little evidence of irritation and no evidence of eliciting an allergic response in human subjects. Results from a 90-day subacute oral diet (rat) study indicate a NOEL of 0.94 g/kg/day and results from a 6-month subchronic oral diet (rat) study indicate a LOEL of 0.87 g/kg/day. No indication of significant gross or microscopic adverse effects were reported. This material was not mutagenic in the Ames Assay. Chronic toxicity studies in rats (2-yr) and dogs (1-yr) also reported no significant adverse effects at the doses administered. No adverse effect on reproductive function or fetal development were observed in rats treated with DSS at 0.5 and 1.0% doses, which were not maternally toxic.

12. ECOLOGICAL INFORMATION

TOXICITY, PERSISTENCE AND DEGRADABILITY, BIOACCUMULATIVE POTENTIAL, MOBILITY IN SOIL, OTHER ADVERSE EFFECTS

Overall Environmental Toxicity: Harmful to aquatic life.

All ecological information provided was conducted on a structurally similar product.

This material is estimated to be harmful to fish and aquatic organisms (LC50 between 10 and 100 mg/l) .

FISH TEST RESULTS

Test: Acute toxicity, freshwater (OECD 203)

Duration: 96 hr.

Species: Rainbow Trout (*Oncorhynchus mykiss*)

>10 - 100 mg/l LC50

INVERTEBRATE TEST RESULTS

Test: Acute Immobilization (OECD 202)

Duration: 48 hr

Species: Water Flea (*Daphnia magna*)

>10 - 100 mg/l EC50

DEGRADATION**Test:** Closed Bottle (OECD 301D)**Duration:** 28 day

>70 %

MOBILITY IN SOIL

Not available

RESULTS OF PBT AND vPvB ASSESSMENT

Not determined

HAZARDOUS INGREDIENT TOXICITY DATA

Component / CAS No.	Toxicity to Algae	Toxicity to Fish	Toxicity to Water Flea
Sodium dioctyl sulfosuccinate 577-11-7	Not available	LC50 20 - 40 mg/L - Oncorhynchus mykiss (96h) semi-static LC50 = 37 mg/L - Lepomis macrochirus (96h) static LC50 < 24 mg/L - Oncorhynchus mykiss (96h) static	EC50 = 36 mg/L - Daphnia magna (48h)

13. DISPOSAL CONSIDERATIONS

The information on RCRA waste classification and disposal methodology provided below applies only to the product, as supplied. If the material has been altered or contaminated, or it has exceeded its recommended shelf life, the guidance may be inapplicable. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA "listed hazardous waste" or has any of the four RCRA "hazardous waste characteristics." Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA "listed hazardous waste"; information contained in Section 15 of this MSDS is not intended to indicate if the product is a "listed hazardous waste." RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: Ignitability, Corrosivity, Reactivity, and Toxicity. To determine Ignitability, see Section 9 of this MSDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 3 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed. The Company encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. The Company recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. The Company has provided the foregoing for information only; the person generating the waste is responsible for determining the waste classification and disposal method.

14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

US DOT

Dangerous Goods? Not applicable/Not regulated

TRANSPORT CANADA

Dangerous Goods? Not applicable/Not regulated

ICAO / IATA

Dangerous Goods? Not applicable/Not regulated

IMO

Dangerous Goods? Not applicable/Not regulated

15. REGULATORY INFORMATION**Inventory Information**

United States (USA): All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

Canada: All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

European Economic Area (including EU): When purchased from a Cytec legal entity based in the EU, this product is compliant with the registration of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt, pre-registered and/or registered.

Australia: All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on AICS.

China: All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

Japan: All components of this product are included on the Japanese (ENCS) inventory or are not required to be listed on the Japanese inventory.

Korea: All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory.

Philippines: All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine inventory.

Switzerland: All components of this product are exempt from the new substance notification requirements for Switzerland (SR 813.11 art. 16-17).

Taiwan: All components of this product are included on the Taiwan Chemical Substance Inventory (TCSI) or are not required to be listed on the Taiwan inventory.

OTHER ENVIRONMENTAL INFORMATION

The following components of this product may be subject to reporting requirements pursuant to Section 313 of CERCLA (40 CFR 372), Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40 CFR 311, etc.) See Section 13 for information on waste classification and waste disposal of this product.

This product does not contain any components regulated under these sections of the EPA

PRODUCT HAZARD CLASSIFICATION UNDER SECTION 311 OF SARA

- Acute

16. OTHER INFORMATION**NFPA Hazard Rating (National Fire Protection Association)**

Health: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

Fire: 1 - Materials that must be preheated before ignition can occur.

Instability: 0 - Materials that in themselves are normally stable, even under fire exposure conditions.

Reasons For Issue: Date update

Date Prepared: 03/02/2016

Date of last significant revision: 03/01/2016

Component Hazard Phrases

Sodium dioctyl sulfosuccinate

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H402 - Harmful to aquatic life.

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