

MIRANOL C2M SF CONC

Revision Date 12/19/2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

- Trade name MIRANOL C2M SF CONC

1.2 Relevant identified uses of the substance or mixture and uses advised against**Uses of the Substance / Mixture**

- Surfactants for various applications

1.3 Details of the supplier of the safety data sheet**Company**

CYTEC CANADA INC.
9061 Garner Road, Niagara Falls,
Ontario, Canada L2H 0Y2
Tel: +1-905-356-9000

1.4 Emergency telephone

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CONTACT CHEMTREC (24-Hour Number): +1-800-424-9300 within the United States and Canada, or +1-703-527-3887 for international collect calls.

SECTION 2: Hazards identification

Although WHMIS has not adopted the environmental portion of the GHS regulations, this document may include information on environmental effects

2.1 Classification of the substance or mixture**Hazardous Products Regulations (WHMIS 2015)**

Flammable liquids, Category 4
Serious eye damage, Category 1
Skin sensitization, Sub-category 1B
Specific target organ toxicity - single exposure, Category 2

H227: Combustible liquid.
H318: Causes serious eye damage.
H317: May cause an allergic skin reaction.
H371: May cause damage to organs. (Central nervous system, optic nerve)

2.2 Label elements**Hazardous Products Regulations (WHMIS 2015)****Pictogram****Signal Word**

- Danger

Hazard Statements

- H227 Combustible liquid.
- H317 May cause an allergic skin reaction.

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- H318 Causes serious eye damage.
- H371 May cause damage to organs (Central nervous system, optic nerve).

Precautionary StatementsPrevention

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P260 Do not breathe mist or vapors.
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

- P302 + P352 IF ON SKIN: Wash with plenty of water.
- P305 + P351 + P338 + P310 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/ doctor.
- P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor.
- P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
- P362 + P364 Take off contaminated clothing and wash it before reuse.
- P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage

- P403 Store in a well-ventilated place.
- P405 Store locked up.

Disposal

- P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards which do not result in classification

- H401: Toxic to aquatic life.
- H411: Toxic to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients**3.1 Substance**

- Not applicable, this product is a mixture.

3.2 Mixture

- Chemical nature Aqueous solution of Disodium cocoamphodipropionate

WHMIS Hazardous Ingredients and Impurities

Chemical name	Identification number CAS-No.	Concentration [% wt/wt or V/V]
Disodium Cocoampho Dipropionate	68604-71-7	>= 30 - < 40
Methanol	67-56-1	>= 3 - < 5

WHMIS Non Hazardous Ingredients and Impurities

Chemical name	Identification number CAS-No.	Concentration [% wt/wt or V/V]
Water/Inerts	*****	> 60

SECTION 4: First aid measures**4.1 Description of first-aid measures****General advice**

- First responder needs to protect himself.
- Show this material safety data sheet to the doctor in attendance.
- Place affected apparel in a sealed bag for subsequent decontamination.
- When symptoms persist or in all cases of doubt seek medical advice.

In case of inhalation

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Keep patient warm and at rest.
- Consult a physician.
- Get medical attention immediately if symptoms occur.

In case of skin contact

- Take off contaminated clothing and shoes immediately.
- Wash off immediately with soap and plenty of water.
- Use a mild soap if available.
- Consult a physician.

In case of eye contact

- Rinse immediately with plenty of water, also under the eyelids.
- Take victim immediately to hospital.
- Continue rinsing eyes during transport to hospital.

In case of ingestion

- Do not induce vomiting without medical advice.
- Rinse mouth with water.
- Do not give anything to drink.
- Keep at rest.
- Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed**Symptoms**

- Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48 hours.
- Symptoms will depend on the target organs.

4.3 Indication of any immediate medical attention and special treatment needed**Notes to physician**

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

- Extinguishing media - small fires
- Water spray
- Multipurpose powders

- Carbon dioxide (CO₂)
- Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)
- Extinguishing media - large fires
- Water spray
- Multipurpose powders
- Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)

Unsuitable extinguishing media

- Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture**Specific hazards during fire fighting**

- Combustible liquid.
- May burn with a colourless flame
- The pressure in sealed containers can increase under the influence of heat.
- In case of heating:
- Harmful or toxic vapors are released.
- Hazardous decomposition products formed under fire conditions.
- (following evaporation of water)
- High concentrations of toxic or harmful products may remain in the residual liquid once the fire has been extinguished.

Hazardous combustion products:

- Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
- Nitrogen oxides (NO_x)

5.3 Advice for firefighters**Special protective equipment for fire-fighters**

- Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.
- Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Specific fire fighting methods

- Stay upwind.
- Fight fire with normal precautions from a reasonable distance.
- Do not use a solid water stream as it may scatter and spread fire.
- Cool down the containers / equipment exposed to heat with a water spray. Ensure that there is NO direct contact between the water and the product.
- Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Persons who may have been exposed to contaminated smoke should be immediately examined by a physician and checked for symptoms of poisoning. The symptoms should not be mistaken for heat exhaustion or smoke inhalation.

Further information

- Evacuate personnel to safe areas.

- Intervention only by capable personnel who are trained and aware of the hazards of the product.
- Never approach containers which have been exposed to fire, without cooling them sufficiently.
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Immediately evacuate personnel to safe areas.
- Stay upwind.
- Only qualified personnel equipped with suitable protective equipment may intervene.
- Avoid inhalation, ingestion and contact with skin and eyes.
- Wear chemical resistant personal protective equipment
- Wear suitable gloves.
- Wear suitable protective clothing.
- Respiratory protection
- Wear as appropriate:
 - Face-shield
 - Tightly fitting safety goggles
- In the case of dust or aerosol formation use respirator with an approved filter.
- In the case of vapor formation use a respirator with an approved filter.
- Eliminate all ignition sources if safe to do so.
- Stop leak if safe to do so.
- If spillage occurs on the public highway, indicate the danger and notify the authorities (police, fire service).
- For further information refer to section 8 "Exposure controls / personal protection."

6.2 Environmental precautions

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.
- Prevent further leakage or spillage if safe to do so.
- Contain the spilled material by diking.
- The product should not be allowed to enter drains, water courses or the soil.
- Local authorities should be advised if significant spillages cannot be contained.
- If the product contaminates rivers and lakes or drains inform respective authorities.
- If the spill area is porous, the contaminated material must be collected for subsequent treatment or disposal.

6.3 Methods and materials for containment and cleaning up

- No sparking tools should be used.
- Stop leak if safe to do so.
- Dam up with sand or inert earth (do not use combustible materials).
- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
- Shovel or sweep up.

- Keep in suitable, closed containers for disposal.
- Never return spills in original containers for re-use.
- Wash nonrecoverable remainder with large amounts of water.
- Clean contaminated surface thoroughly.
- Recover the cleaning water for subsequent disposal.
- Decontaminate tools, equipment and personal protective equipment in a segregated area.
- Dispose of as hazardous waste in compliance with local and national regulations.

Additional advice

- Mark the contaminated area with signs and prevent access to unauthorized personnel.
- Only qualified personnel equipped with suitable protective equipment may intervene.
- Material can create slippery conditions.

6.4 Reference to other sections

- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 13. DISPOSAL CONSIDERATIONS

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

- Handle in accordance with good industrial hygiene and safety practice.
- Wear personal protective equipment.
- Wear suitable protective clothing.
- Avoid inhalation, ingestion and contact with skin and eyes.
- Do NOT handle without gloves.
- Do NOT handle if hands have any cuts or wounds.
- Avoid splashes.
- Avoid formation of aerosol.
- For personal protection see section 8.

Hygiene measures

- Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials:
 - 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
 - 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
 - 3) Wash exposed skin promptly to remove accidental splashes or contact with material.
- The user is responsible for monitoring the working environment in accordance with local laws and regulations.
- Exposed employees should have regular medical check-ups

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.
- Keep in a contained area
- The floor of the storage area should be impermeable and designed to form a water-tight basin.
- Keep locked up or in an area accessible only to qualified or authorized persons.
- Keep containers tightly closed in a dry, cool and well-ventilated place.
- Keep away from open flames, hot surfaces and sources of ignition.
- Keep away from incompatible materials to be indicated by the manufacturer
- Do not freeze.
- Keep away from: Hazardous reactions may occur on contact with certain chemicals. (Refer to the list of incompatible materials section 10: "Stability-Reactivity").

Packaging material**Suitable material**

- Plastic materials.
- Coated metals.

Unsuitable material

- Uncoated metals

Remarks

- Store in original container.

Requirements for storage rooms and vessels

Recommended storage temperature: 50 - 120 °F (10 - 49 °C)

- Low pressure steam or a water bath may be used to melt solidified material
- Do not freeze.

7.3 Specific end use(s)

- no data available

SECTION 8: Exposure controls/personal protection

Introductory Remarks: These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

8.1 Control parameters**Components with workplace occupational exposure limits**

Consult local authorities for acceptable exposure limits.

Components	Value type	Value	Basis
Methanol	TWA	200 ppm	American Conference of Governmental Industrial Hygienists

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	Danger of cutaneous absorption		
Methanol	STEL	250 ppm	American Conference of Governmental Industrial Hygienists
	Danger of cutaneous absorption		

Biological Exposure Indices

Components	Value type	Value	Basis
Methanol	BEI	15 mg/l Methanol Urine End of shift (As soon as possible after exposure ceases)	American Conference of Governmental Industrial Hygienists
	Nonspecific Background		

8.2 Exposure controls**Control measures****Engineering measures**

- Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures :
- Effective exhaust ventilation system
- Ensure adequate ventilation.
- Extract at emission point.
- Ensure that extracted air cannot be returned to the workplace through the ventilation system.
- Avoid splashes.
- Avoid formation of aerosol.

Individual protection measures**Respiratory protection**

- This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation.
- When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.
- If mist is formed:
- If vapor is released:
- Wear a positive-pressure supplied-air respirator with full facepiece.

Hand protection

- Where there is a risk of contact with hands, use appropriate gloves
- Gloves must be inspected prior to use.
- Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
- Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Suitable material

- butyl-rubber

Eye protection

- Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.
- Eye contact should be prevented through the use of:
 - Tightly fitting safety goggles
 - Face-shield

Skin and body protection

- Full protective suit
- Footwear protecting against chemicals
- Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

- Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials:
 - 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
 - 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
 - 3) Wash exposed skin promptly to remove accidental splashes or contact with material.
- The user is responsible for monitoring the working environment in accordance with local laws and regulations.
- Exposed employees should have regular medical check-ups

Protective measures

- Emergency equipment immediately accessible, with instructions for use.
- Ensure that eyewash stations and safety showers are close to the workstation location.
- Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards, and/or risks that may occur during use.
- The protective equipment must be selected in accordance with current local regulations and in cooperation with the supplier of the protective equipment.

SECTION 9: Physical and chemical properties

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product information phone number in Section 1 for its exact specifications.

9.1 Information on basic physical and chemical properties

<u>Physical state</u>	liquid (68 °F (20 °C))
<u>Form</u>	Aqueous solution
<u>Color</u>	clear amber
<u>Odor</u>	alcohol-like Do not attempt to smell the product as it is hazardous.

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<u>Odor Threshold</u>	No data available
<u>Melting point/freezing point</u>	<u>Freezing point</u> : < 32 °F (< 0 °C)
<u>Initial boiling point and boiling range</u>	<u>Boiling point/boiling range</u> : > 208 °F (> 98 °C)
<u>Flammability (solid, gas)</u>	No data available
<u>Flammability (liquids)</u>	No data available
<u>Flammability / Explosive limit</u>	<u>Lower flammability/explosion limit</u> : 6.00 %(V) <u>Upper flammability/explosion limit</u> : 36.00 %(V)
<u>Flash point</u>	144 °F (62 °C) closed cup Flammability class: Combustible, This product does not sustain combustion when tested in accordance with 49 CFR 173.120 / UN Sustained Combustibility Testing.
<u>Autoignition temperature</u>	No data available
<u>Decomposition temperature</u>	No data available
<u>pH</u>	9.4 - 9.8 (100 %) (86 °F (30 °C)) (undiluted)
<u>Viscosity</u>	No data available
<u>Solubility</u>	<u>Water solubility</u> : completely miscible <u>Solubility in other solvents</u> : organic polar solvents: soluble
<u>Partition coefficient: n-octanol/water</u>	No data available
<u>Vapor pressure</u>	< 23.50 mmHg (31.33 hPa) (77 °F (25 °C))
<u>Density</u>	1.07 g/cm ³ (68 °F (20 °C))
<u>Relative density</u>	1.05 - 1.09 (77 °F (25 °C))
<u>Relative vapor density</u>	No data available
<u>Particle characteristics</u>	No data available
<u>Evaporation rate (Butylacetate = 1)</u>	No data available

9.2 Other information

Oxidizing properties Not considered as oxidizing., Structure-activity relationship (SAR)

SECTION 10: Stability and reactivity

10.1 Reactivity

- Stable at normal ambient temperature and pressure.

10.2 Chemical stability

- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

- No dangerous reaction known under conditions of normal use.
- Hazardous polymerization does not occur.

10.4 Conditions to avoid

- Keep away from open flames, hot surfaces and sources of ignition.
- Avoid high temperatures.
- Avoid excessive heat for prolonged periods of time.

10.5 Incompatible materials

- Strong oxidizing agents
- Strong reducing agents
- Strong acids
- Strong bases

10.6 Hazardous decomposition products

- On combustion or on thermal decomposition (pyrolysis), releases:
- Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
- Nitrogen oxides (NO_x)

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Acute oral toxicity**

Disodium Cocoampho Dipropionate

By analogy

Rat

Mouse

LD50: > 5,000 mg/kg , male and female

Method: according to a standardized method

Not classified as hazardous for acute oral toxicity according to GHS.

Unpublished internal reports

Information given is based on data obtained from similar substances.

Acute inhalation toxicity

No data available

Acute dermal toxicity

Disodium Cocoampho Dipropionate

By analogy

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LD50 : > 2,000 mg/kg - Rat , male and female
 Method: OECD Test Guideline 402
 Not classified as hazardous for acute dermal toxicity according to GHS.
 No mortality observed at this dose.
 Unpublished internal reports

Acute toxicity (other routes of administration)

No data available

Skin corrosion/irritation

Disodium Cocoampho Dipropionate

By analogy

Rabbit
 No skin irritation
 Method: Draize Test
 Unpublished internal reports

Serious eye damage/eye irritation

Disodium Cocoampho Dipropionate

By analogy

Rabbit
 Irreversible effects on the eye
 Method: according to a standardized method
 Unpublished internal reports

Respiratory or skin sensitization

Disodium Cocoampho Dipropionate

Maximization Test - Guinea pig
 $\geq 30\%$ to $< 60\%$ responding at $> 0,1\%$ to $\leq 1\%$ intradermal induction dose
 Method: OECD Test Guideline 406
 Unpublished reports

Mutagenicity**Genotoxicity in vitro**

Disodium Cocoampho Dipropionate

By analogy

Ames test
 Strain: Salmonella typhimurium and Escherichia coli
 with and without metabolic activation

negative
 Method: OECD Test Guideline 471
 Unpublished internal reports

By analogy

Chromosome aberration test in vitro
 Strain: Human lymphocytes
 with and without metabolic activation

negative
 Method: OECD Test Guideline 473
 Unpublished internal reports

By analogy

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In vitro micronucleus test
Strain: Human lymphocytes
with and without metabolic activation

negative
Method: OECD Test Guideline 473
Unpublished internal reports

Gene mutation assays in mammalian cells.
Strain: mouse lymphoma cells
with and without metabolic activation

negative
Method: OECD Test Guideline 476
Unpublished internal reports

Genotoxicity in vivo

No data available

Carcinogenicity

No data available

Toxicity for reproduction and development**Toxicity to reproduction / fertility**

Disodium Cocoampho Dipropionate

By analogy

One-Generation Reproduction Toxicity Study - Rat, male and female, Oral
General Toxicity Parent NOAEL: 1,000 mg/kg bw/day
Method: OECD Test Guideline 422
No effect observed on development, Highest dose tested, Unpublished internal reports

Developmental Toxicity/Teratogenicity

Disodium Cocoampho Dipropionate

By analogy

Reproduction / developmental toxicity screening test - Rat, male and female, Oral
General Toxicity Maternal NOAEL: 1,000 mg/kg bw/day
Developmental Toxicity NOAEL F1: 1,000 mg/kg bw/day
Method: OECD Test Guideline 421
No effect observed on development, Unpublished internal reports

STOT**STOT-single exposure**

Disodium Cocoampho Dipropionate

By analogy

Routes of exposure: Ingestion, Skin contact
The substance or mixture is not classified as specific target organ toxicant, single exposure according to GHS criteria.
Unpublished internal reports

STOT-repeated exposure

Disodium Cocoampho Dipropionate

By analogy

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Routes of exposure: Ingestion

The substance or mixture is not considered to cause damage to organs through prolonged or repeated exposure.

Disodium Cocoampho Dipropionate

By analogy

Oral - Rat , male and female

NOAEL: 1000 mg/kg bw/day

Method: OECD Test Guideline 422

Gavage

No adverse effect has been observed in toxicity tests by repeated administration

Unpublished internal reports

Experience with human exposure

No data available

Aspiration toxicity

No data available

SECTION 12: Ecological information**12.1 Toxicity****Aquatic Compartment****Acute toxicity to fish**

Disodium Cocoampho Dipropionate

By analogy

LC50 - 96 h : 2.6 mg/l - Cyprinus carpio (Carp)

static test

Analytical monitoring: yes

Test substance: At saturation in water

Method: OECD Test Guideline 203

Toxic to fish.

Fresh water

Unpublished internal reports

Acute toxicity to daphnia and other aquatic invertebrates

Disodium Cocoampho Dipropionate

By analogy

EC50 - 48 h : 90 mg/l - Daphnia

static test

Analytical monitoring: yes

Test substance: At saturation in water

Method: OECD Test Guideline 202

Harmful to aquatic invertebrates.

Fresh water

Unpublished internal reports

Toxicity to aquatic plants

Disodium Cocoampho Dipropionate

By analogy

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ErC50 - 72 h : 33 mg/l - Pseudokirchneriella subcapitata (microalgae)
 static test
 Analytical monitoring: yes
 Endpoint: Growth rate
 Test substance: At saturation in water
 Method: OECD Test Guideline 201
 Harmful to algae.
 Fresh water
 Unpublished internal reports

By analogy

NOErC - 72 h : 0.82 mg/l - Pseudokirchneriella subcapitata (green algae)
 static test
 Analytical monitoring: yes
 Endpoint: Growth rate
 Test substance: At saturation in water
 Method: OECD Test Guideline 201
 Toxic to algae with long lasting effects.
 Fresh water
 Unpublished internal reports

Toxicity to microorganisms

Disodium Cocoampho Dipropionate

activated sludge
 static test
 Endpoint: Respiration inhibition

EC50 - 3 h : 1,000 mg/l

NOEC - 3 h : 390 mg/l

Method: OECD Test Guideline 209
 Fresh water
 Unpublished internal reports

Chronic toxicity to fish

No data available

Chronic toxicity to daphnia and other aquatic invertebrates

No data available

Terrestrial Compartment**Toxicity to soil dwelling organisms**

Disodium Cocoampho Dipropionate

By analogy

LC50: > 160 mg/kg - 14 Days - Eisenia fetida (earthworms)
 Method: OECD Test Guideline 207
 Unpublished reports

- soil micro-organisms
 Endpoint: Nitrogen transformation

EC50: > 247.5 mg/kg - 28 d

NOEC: > 30.9 mg/kg - 28 d

Method: OECD Test Guideline 216
 Unpublished reports

Toxicity to terrestrial plants

Disodium Cocoampho Dipropionate

By analogy

- Lactuca sativa (lettuce)
Endpoint: Growth

- Daucus carota (carrot)
Endpoint: Growth

- Solanum lycopersicum (tomato)
Endpoint: Growth

- Avena sativa (oats)
Endpoint: Growth

EC50: > 1,000 mg/kg - 21 Days

NOEC: > 1,000 mg/kg - 21 Days

Method: OECD Test Guideline 208
Unpublished internal reports

By analogy

- Brassica pekinensis (Chinese cabbage)
Endpoint: Growth

EC50: > 1,000 mg/kg - 21 Days

EC10: 73 mg/kg - 21 Days

Method: OECD Test Guideline 208
Unpublished internal reports

12.2 Persistence and degradability**Abiotic degradation****Stability in water**

Conclusion is not possible for a mixture as a whole.

Photodegradation

Conclusion is not possible for a mixture as a whole.

Physical- and photo-chemical elimination**Physico-chemical removability**

Conclusion is not possible for a mixture as a whole.

Biodegradation**Biodegradability**

As (bio)degradability is not relevant for mixtures, all the components of the mixture were assessed individually (rapid degradability assessment available below).

Degradability assessment

All or most of the components are considered to be not rapidly degradable in the environment

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water

Conclusion is not possible for a mixture as a whole.

Bioconcentration factor (BCF)

As bioaccumulation is not relevant for mixtures, all the components of the mixture were assessed individually.

None of the components are considered to be potentially bioaccumulable
 Unpublished reports
 Published data

12.4 Mobility in soil**Adsorption potential (Koc)**

Conclusion is not possible for a mixture as a whole.

Known distribution to environmental compartments

Disodium Cocoampho Dipropionate

Ultimate destination of the product: Water

12.5 Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating, and toxic (PBT).

This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects**Ecotoxicity assessment****Short-term (acute) aquatic hazard**

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Toxic to aquatic life.

Long-term (chronic) aquatic hazard

Disodium Cocoampho Dipropionate

Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product Disposal*****Prohibition***

- Do not discharge directly into the environment.
- Do not dispose of with domestic refuse.
- Dispose of as hazardous waste in compliance with local and national regulations.
- Waste Management options should first consider possible re-use or recycling opportunities. Some provinces have active "Waste Exchange" networks for re-use and recycling of wastes. Contact your local waste management companies to explore available options. All waste management activities must obey local, provincial and federal regulations. Possible disposal methods include the following:
- Can be incinerated, when in compliance with local regulations.

Advice on cleaning and disposal of packaging***Prohibition***

- Do NOT dispose of untreated packaging with industrial waste.
- Do not dispose of with domestic refuse.
- Empty remaining contents.

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- Clean using steam.
- Monitor the residual vapors.
- Dispose of rinse water in accordance with local and national regulations.
- Containers that cannot be cleaned must be treated as waste.
- Dispose of contents/ container to an approved waste disposal plant.
- Dispose of in accordance with local regulations.
- In accordance with IMDG regulations containers or tankers that have not been cleaned or deodorized and that previously contained a hazardous product, must either be labeled or have hazard signs.
- Where possible recycling is preferred to disposal or incineration.
- The recycled material must be completely dry and free of pollutants.

SECTION 14: Transport information

Transportation status: IMPORTANT! Statements below provide additional data on listed transport classification.

The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

TDG

14.1 UN number	UN 3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Disodium cocoamphopropionate)
14.3 Transport hazard class	9
Label(s)	9
14.4 Packing group	
Packing group	III
ERG No	171
14.5 Environmental hazards	YES
Marine pollutant	Marine Pollutant

49 CFR

14.1 UN number	UN 3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Disodium cocoamphopropionate)
14.3 Transport hazard class	9
Label(s)	9
14.4 Packing group	
Packing group	III
ERG No	171
14.5 Environmental hazards	YES
Marine pollutant	

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NOM

14.1 UN number	UN 3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Disodium cocoamphopropionate)
14.3 Transport hazard class	9
Label(s)	9
14.4 Packing group	
Packing group	III
ERG No	171
14.5 Environmental hazards	YES
Marine pollutant	

IMDG

14.1 UN number	UN 3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Disodium cocoamphopropionate)
IMDG Code segregation group	Not Relevant
14.3 Transport hazard class	9
Label(s)	9
14.4 Packing group	
Packing group	III
14.5 Environmental hazards	YES
Marine pollutant	
14.6 Special precautions for user	
EmS	F-A , S-F

For personal protection see section 8.

14.7 Transport in bulk vessels according to IMO instruments
No data available

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IATA

14.1 UN number	UN 3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Disodium cocoamphopropionate)
14.3 Transport hazard class	9
Label(s):	9
14.4 Packing group	
Packing group	III
Packing instruction (cargo aircraft)	964
Max net qty / pkg	450.00 L
Packing instruction (passenger aircraft)	964
Max net qty / pkg	450.00 L
14.5 Environmental hazards	YES
14.6 Special precautions for user	
For personal protection see section 8.	

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transportation regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information**15.1 Notification status**

Inventory Information	Status
United States TSCA Inventory	- All substances listed as active on the TSCA inventory
Canadian Domestic Substances List (DSL)	- Listed on Inventory
Australian Inventory of Industrial Chemicals (AIIC)	- Listed on Inventory: Listed introduction
Japan. CSCL - Inventory of Existing and New Chemical Substances	- Listed on Inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- Listed on Inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- Listed on Inventory
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	- Listed on Inventory
Taiwan Chemical Substance Inventory (TCSI)	- Listed on Inventory
New Zealand. Inventory of Chemical Substances	- One or more components is not listed on the NZIoC inventory. Additional HSNO obligations may apply. Please refer to Section 15 of SDS for New Zealand.

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EU. European Registration, Evaluation, Authorization and Restriction of Chemical (REACH)	- When purchased from a Syensqo legal entity based in the EEA ("European Economic Area"), this product is compliant with the registration provisions of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt, and/or registered. When purchased from a legal entity outside of the EEA, please contact your local representative for additional information.
Korea. Act on Registration and Evaluation of Chemicals	- When purchased from a Syensqo legal entity based in Korea, this product is compliant with "Act on Registration and Evaluation of Chemicals" (AREC or K-REACH, Article 10) as all its components are either excluded, exempt, and/or (pre)registered. When purchased from a legal entity outside of Korea, please contact your local representative for additional information.

15.2 National Regulations**Canada. CEPA 1999 Significant New Activity (SNAc) List:**

- No substances are subject to a Significant New Activity Notification.

SECTION 16: Other information**Revision Date:**

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NFPA (National Fire Protection Association) - Classification

Health	2 moderate
Flammability	2 moderate
Instability or Reactivity	0 minimal

HMIS (Hazardous Materials Identification System (Paint & Coating)) - Classification

Health	2 moderate
Flammability	2 moderate
Reactivity	0 minimal
PPE	Determined by User; dependent on local conditions

Further information

- Distribute new edition to clients
- Update
- See section 2

Key or legend to abbreviations and acronyms used in the safety data sheet

- C: Ceiling
- PEL: Permissible exposure limit
- ST: STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
- STEL: Short term exposure limit

- TWA: 8-hour, time-weighted average
- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration
- NTP: National Toxicology Program
- IARC: International Agency for Research on Cancer
- NIOSH: National Institute for Occupational Safety and Health
- ADR: European Agreement on International Carriage of Dangerous Goods by Road.
- ADN: European Agreement on the International Carriage of Dangerous Goods by Inland Waterways.
- RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
- IATA: International Air Transport Association.
- ICAO-TI: Technical Specification for Safe Transport of Dangerous Goods by Air.
- IMDG: International Maritime Dangerous Goods.
- TWA: Time weighted average
- ATE: Estimated value of acute toxicity
- EC: European Community number
- CAS: Chemical Abstracts Service.
- LD50: Substance that causes 50% (half) death in the test animals group (Median Fatal Dose).
- LC50: Substance concentration causing 50% (half) death in the test animals group.
- EC50: Effective Concentration of the substance causing the maximum of 50%.
- PBT: Persistent, Bioaccumulative and Toxic substance.
- vPvB: Very Persistent and Very Bioaccumulative.
- SEA: Classification, labeling, packaging regulation
- DNEL: Derived No Effect Level
- PNEC: Predicted No Effect Concentration
- STOT: Specific Target Organ Toxicity

Not all acronyms listed above are referenced in this 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. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose, and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in any other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.