SAFETY DATA SHEET

# PROVON® Medicated Foam Handwash with Advanced Moisturizers Triclosan Liquid

| Version | Revision Date: | SDS Number: | Date of last issue: 11/23/2016 |
|---|---|---|---|
| 1.1 | 02/08/2018 | 400000000395 | Date of first issue: 11/23/2016 |

## SECTION 1. IDENTIFICATION

Product name : PROVON® Medicated Foam Handwash with Advanced Moisturizers Triclosan Liquid

**Manufacturer or supplier's details**

Company name of supplier : GOJO Industries, Inc.

Address : One GOJO Plaza, Suite 500
Akron, Ohio, 44311

Telephone : 1 (330) 255-6000

Emergency telephone number : CHEMTREC 1-800-424-9300
CHEMTREC +1-703-527-3887: Outside USA & CANADA

**Recommended use of the chemical and restrictions on use**

Recommended use : Antibacterial Soap

Restrictions on use : This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use. Cosmetics and consumer products, specifically defined by regulations around the world, are exempt from the requirement of an SDS for the consumer. While this material is not considered hazardous, this SDS contains valuable information critical to the safe handling and proper use of the product for industrial workplace conditions as well as unusual and unintended exposures such as large spills. This SDS should be retained and available for employees and other users of this product. For specific intended-use guidance, please refer to the information provided on the package or instruction sheet.

## SECTION 2. HAZARDS IDENTIFICATION

**GHS Classification**

Flammable liquids : Category 3

Serious eye damage : Category 1

**GHS label elements**

Hazard pictograms :

Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.
H318 Causes serious eye damage.

Precautionary statements :

**Prevention:**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P280 Wear eye protection/ face protection.

**Response:**

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 or doctor/ physician.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Storage:**

P403 + P235 Store in a well-ventilated place. Keep cool.

**Disposal:**

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

**Other hazards**

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Hazardous components**

| Chemical name | CAS-No. | Concentration (% w/w) |
|---|---|---|
| Propylene Glycol | 57-55-6 | >= 10 - < 20 |
| Ethyl Alcohol | 64-17-5 | >= 5 - < 10 |
| Lauric Acid | 143-07-7 | >= 5 - < 10 |
| Ethanolamine | 141-43-5 | >= 1 - < 5 |
| Disodium Cocoamphodiacetate | 68650-39-5 | >= 1 - < 5 |
| Lactic Acid | 79-33-4 | >= 1 - < 5 |

## SECTION 4. FIRST AID MEASURES

| | | |
|---|---|---|
| General advice | : | In the case of accident or if you feel unwell, seek medical advice immediately.<br>When symptoms persist or in all cases of doubt seek medical advice. |
| If inhaled | : | If inhaled, remove to fresh air.<br>If symptoms persist, call a physician. |
| In case of skin contact | : | Wash with water and soap as a precaution.<br>Get medical attention if irritation develops and persists. |
| In case of eye contact | : | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.<br>If easy to do, remove contact lens, if worn.<br>Seek medical advice. |
| If swallowed | : | If swallowed, DO NOT induce vomiting.<br>Rinse mouth with water.<br>Obtain medical attention. |
| Most important symptoms and effects, both acute and delayed | : | None known. |
| Protection of first-aiders | : | First Aid responders should pay attention to self-protection and use the recommended protective clothing |

## SECTION 5. FIREFIGHTING MEASURES

| | | |
|---|---|---|
| Suitable extinguishing media | : | Water spray<br>Alcohol-resistant foam<br>Carbon dioxide (CO2)<br>Dry chemical |
| Unsuitable extinguishing media | : | High volume water jet |
| Specific hazards during fire-fighting | : | Do not use a solid water stream as it may scatter and spread fire.<br>Flash back possible over considerable distance.<br>May form explosive mixtures in air. |
| Hazardous combustion products | : | Carbon oxides<br>Nitrogen oxides (NOx)<br>Metal oxides |
| Specific extinguishing methods | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.<br>Use water spray to cool unopened containers. |
| Further information | : | 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.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Remove all sources of ignition.
Use personal protective equipment.
Ensure adequate ventilation.
Evacuate personnel to safe areas.
Keep people away from and upwind of spill/leak.
Material can create slippery conditions.

Environmental precautions : Discharge into the environment must be avoided.
Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g. by containment or oil barriers).
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up : Non-sparking tools should be used.
Soak up with inert absorbent material.
Suppress (knock down) gases/vapours/mists with a water spray jet.
Keep in suitable, closed containers for disposal.
Clean contaminated floors and objects thoroughly while observing environmental regulations.

## SECTION 7. HANDLING AND STORAGE

Advice on safe handling : For personal protection see section 8.
Keep away from fire, sparks and heated surfaces.
Use only with adequate ventilation.
Avoid contact with eyes.

Conditions for safe storage : Keep in properly labelled containers.
Keep container tightly closed in a dry and well-ventilated place.
Store in accordance with the particular national regulations.
Keep away from sources of ignition - No smoking.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Components with workplace control parameters**

| Components | CAS-No. | Value type (Form of | Control parameters / Permissible | Basis |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| | | exposure) | concentration | |
| Propylene Glycol | 57-55-6 | TWA (aero-sol) | 10 mg/m3 | CA ON OEL |
| | | TWA (Va-pour and aerosols) | 50 ppm<br>155 mg/m3 | CA ON OEL |
| | | TWA (Va-pour and aerosols) | 50 ppm<br>155 mg/m3 | CA ON OEL |
| Ethyl Alcohol | 64-17-5 | TWA | 1,000 ppm<br>1,880 mg/m3 | CA AB OEL |
| | | STEL | 1,000 ppm | CA BC OEL |
| | | TWAEV | 1,000 ppm<br>1,880 mg/m3 | CA QC OEL |
| | | STEL | 1,000 ppm | ACGIH |
| Ethanolamine | 141-43-5 | STEL | 6 ppm<br>15 mg/m3 | CA AB OEL |
| | | TWA | 3 ppm<br>7.5 mg/m3 | CA AB OEL |
| | | TWA | 3 ppm | CA BC OEL |
| | | STEL | 6 ppm | CA BC OEL |
| | | TWAEV | 3 ppm<br>7.5 mg/m3 | CA QC OEL |
| | | STEV | 6 ppm<br>15 mg/m3 | CA QC OEL |
| | | TWA | 3 ppm | ACGIH |
| | | STEL | 6 ppm | ACGIH |

**Personal protective equipment**

Respiratory protection : No personal respiratory protective equipment normally required.

Eye protection : Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : No special measures necessary provided product is used correctly.

Protective measures : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Ensure that eye flushing systems and safety showers are located close to the working place.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

| | | |
|---|---|---|
| Colour | : | clear, colourless, light yellow |
| Odour | : | alcohol-like |
| Odour Threshold | : | No data available |
| pH | : | 7.8 - 9.7 |
| Melting point/freezing point | : | No data available |
| Initial boiling point and boiling range | : | > 100 °C<br>No data available |
| Flash point | : | 56.00 °C |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | Not applicable |
| Upper explosion limit | : | No data available |
| Lower explosion limit | : | No data available |
| Vapour pressure | : | No data available |
| Relative vapour density | : | No data available |
| Density | : | 1.0156 g/cm3 |
| Solubility(ies)<br>Water solubility | :<br>: | <br>soluble |
| Partition coefficient: n-octanol/water | : | Not applicable |
| Auto-ignition temperature | : | not determined |
| Decomposition temperature | : | The substance or mixture is not classified self-reactive. |
| Viscosity<br>Viscosity, kinematic | :<br>: | <br>10 - 20 mm2/s (20 °C) |
| Explosive properties | : | Not explosive |
| Oxidizing properties | : | The substance or mixture is not classified as oxidizing. |

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | Not classified as a reactivity hazard. |
| Chemical stability | : | Stable under normal conditions. |
| Possibility of hazardous reac- | : | Vapours may form explosive mixture with air. |

tions

| | | |
|---|---|---|
| Conditions to avoid | : | Heat, flames and sparks. |
| Incompatible materials | : | Oxidizing agents |
| Hazardous decomposition products | : | No hazardous decomposition products are known. |

## SECTION 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

Not classified based on available information.

**Product:**

| | | |
|---|---|---|
| Acute oral toxicity | : | Acute toxicity estimate: > 5,000 mg/kg<br>Method: Calculation method |
| Acute inhalation toxicity | : | Acute toxicity estimate: > 40 mg/l<br>Exposure time: 4 h<br>Test atmosphere: vapour<br>Method: Calculation method |
| Acute dermal toxicity | : | Acute toxicity estimate: > 5,000 mg/kg<br>Method: Calculation method |

**Components:**

**Propylene Glycol:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 5,000 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rabbit): > 159 mg/l, > 51091 ppm<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Assessment: The substance or mixture has no acute inhalation toxicity |
| Acute dermal toxicity | : | LD50 (Rabbit): > 2,000 mg/kg<br>Assessment: The substance or mixture has no acute dermal toxicity |

**Ethyl Alcohol:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 5,000 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rat): 124.7 mg/l<br>Exposure time: 4 h<br>Test atmosphere: vapour |

**Lauric Acid:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 5,000 mg/kg<br>Method: OECD Test Guideline 401 |

| | | |
|---|---|---|
| Acute inhalation toxicity | : | LC50 (Rat): > 0.162 mg/l<br>Exposure time: 4 h<br>Test atmosphere: vapour<br>Remarks: Based on data from similar materials |
| Acute dermal toxicity | : | LD50 (Rabbit): > 2,000 mg/kg<br>Assessment: The substance or mixture has no acute dermal toxicity<br>Remarks: Based on data from similar materials |

**Ethanolamine:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): 1,515 mg/kg |
| Acute inhalation toxicity | : | Acute toxicity estimate: 11 mg/l<br>Test atmosphere: vapour<br>Method: Expert judgement<br>Remarks: Based on harmonised classification in EU regulati on 1272/2008, Annex VI |
| Acute dermal toxicity | : | LD50 (Rabbit): 1,025 mg/kg |

**Disodium Cocoamphodiacetate:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat, male): > 5,000 mg/kg<br>Remarks: Based on data from similar materials |
| Acute dermal toxicity | : | LD50 (Rat): > 5,000 mg/kg<br>Method: OECD Test Guideline 402<br>Remarks: Based on data from similar materials |

**Lactic Acid:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat, female): 3,543 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rat): > 7.94 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Method: OECD Test Guideline 403 |
| Acute dermal toxicity | : | LD50 (Rabbit): > 2,000 mg/kg |

**Skin corrosion/irritation**

Not classified based on available information.

**Product:**

Result: No skin irritation

**Components:**

**Propylene Glycol:**

Species: Rabbit

Method: OECD Test Guideline 404
Result: No skin irritation

**Ethyl Alcohol:**

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

**Lauric Acid:**

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

**Ethanolamine:**

Species: Rabbit
Result: Corrosive after 3 minutes to 1 hour of exposure

**Disodium Cocoamphodiacetate:**

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation
Remarks: Based on data from similar materials

**Lactic Acid:**

Species: Rabbit
Result: Skin irritation

**Serious eye damage/eye irritation**

Causes serious eye damage.

**Components:**

**Propylene Glycol:**

Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

**Ethyl Alcohol:**

Species: Rabbit
Result: Irritation to eyes, reversing within 21 days
Method: OECD Test Guideline 405

**Lauric Acid:**

Species: Rabbit
Result: Irreversible effects on the eye
Method: OECD Test Guideline 405

**Ethanolamine:**

Species: Rabbit
Result: Irreversible effects on the eye

**Disodium Cocoamphodiacetate:**

Species: Rabbit
Result: Irreversible effects on the eye
Method: OECD Test Guideline 405
Remarks: Based on data from similar materials

**Lactic Acid:**

Species: Chicken eye
Result: Irreversible effects on the eye

**Respiratory or skin sensitisation**

**Skin sensitisation**

Not classified based on available information.

**Respiratory sensitisation**

Not classified based on available information.

**Components:**

**Propylene Glycol:**

Test Type: Maximisation Test (GPMT)
Exposure routes: Skin contact
Species: Guinea pig
Result: negative

**Ethyl Alcohol:**

Test Type: Local lymph node assay (LLNA)
Exposure routes: Skin contact
Species: Mouse
Result: negative

**Lauric Acid:**

Test Type: Maximisation Test (GPMT)
Exposure routes: Skin contact
Species: Guinea pig
Result: negative

**Ethanolamine:**

Test Type: Maximisation Test (GPMT)
Exposure routes: Skin contact
Species: Guinea pig
Result: negative

**Disodium Cocoamphodiacetate:**

Test Type: Maximisation Test (GPMT)
Exposure routes: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: negative
Remarks: Based on data from similar materials

**Lactic Acid:**

Test Type: Buehler Test
Exposure routes: Skin contact
Species: Guinea pig
Result: negative

**Germ cell mutagenicity**

Not classified based on available information.

**Components:**

**Propylene Glycol:**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: Bacterial reverse mutation assay (AMES)<br>Result: negative |
| Genotoxicity in vivo | : | Test Type: In vivo micronucleus test<br>Species: Mouse<br>Application Route: Intraperitoneal injection<br>Result: negative |

**Ethyl Alcohol:**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: In vitro mammalian cell gene mutation test<br>Result: negative |
| Genotoxicity in vivo | : | Test Type: Rodent dominant lethal test (germ cell) (in vivo)<br>Species: Mouse<br>Application Route: Ingestion<br>Result: negative |

**Lauric Acid:**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: In vitro mammalian cell gene mutation test<br>Method: OECD Test Guideline 476<br>Result: negative<br>Remarks: Based on data from similar materials |

**Ethanolamine:**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: In vitro mammalian cell gene mutation test<br>Method: OECD Test Guideline 476<br>Result: negative |
| Genotoxicity in vivo | : | Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) |

Species: Mouse
Application Route: Ingestion
Method: OECD Test Guideline 474
Result: negative

**Disodium Cocoamphodiacetate:**

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: negative
Remarks: Based on data from similar materials

: Test Type: Bacterial reverse mutation assay (AMES)
Result: negative
Remarks: Based on data from similar materials

: Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative
Remarks: Based on data from similar materials

**Lactic Acid:**

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro
Metabolic activation: with and without metabolic activation
Result: negative
Remarks: Based on data from similar materials

: Test Type: Bacterial reverse mutation assay (AMES)
Metabolic activation: with and without metabolic activation
Result: negative

**Carcinogenicity**

Not classified based on available information.

**Components:**

**Propylene Glycol:**

Species: Rat
Application Route: Ingestion
Exposure time: 2 Years
Result: negative

**Lactic Acid:**

Species: Rat
Application Route: Ingestion
Exposure time: 2 Years
Result: negative
Remarks: Based on data from similar materials

**Reproductive toxicity**

Not classified based on available information.

**Components:**

**Propylene Glycol:**

Effects on fertility : Species: Mouse
Application Route: Ingestion
Result: negative

Effects on foetal development : Test Type: Embryo-foetal development
Species: Mouse
Application Route: Ingestion
Result: negative

**Ethyl Alcohol:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Mouse
Application Route: Ingestion
Method: OECD Test Guideline 416
Result: negative

**Lauric Acid:**

Effects on fertility : Test Type: Combined repeated dose toxicity study with the re production/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative
Remarks: Based on data from similar materials

Effects on foetal development : Test Type: Combined repeated dose toxicity study with the re production/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative
Remarks: Based on data from similar materials

**Ethanolamine:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Rat
Application Route: Ingestion
Result: negative

Effects on foetal development : Test Type: Embryo-foetal development
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 414
Result: negative

**STOT - single exposure**

Not classified based on available information.

**Components:**

**Ethanolamine:**
Assessment: May cause respiratory irritation.

**Lactic Acid:**
Assessment: May cause respiratory irritation.

**STOT - repeated exposure**
Not classified based on available information.

**Components:**

**Ethanolamine:**
Exposure routes: inhalation (dust/mist/fume)
Assessment: No significant health effects observed in animals at concentrations of 0.2 mg/l/6h/d or less.

**Repeated dose toxicity**

**Components:**

**Propylene Glycol:**
Species: Rat
NOAEL: 1,700 mg/kg
Application Route: Ingestion
Exposure time: 2 y

**Ethyl Alcohol:**
Species: Rat
NOAEL: 2,400 mg/kg
Application Route: Ingestion
Exposure time: 2 y

**Lauric Acid:**
Species: Rat
NOAEL: 10,000 mg/kg
Application Route: Ingestion
Exposure time: 18 w

**Ethanolamine:**
Species: Rat
NOAEL: 150 mg/m3
Application Route: inhalation (dust/mist/fume)
Exposure time: 28 d

**Disodium Cocoamphodiacetate:**
Species: Rat, female
NOAEL: 250 mg/kg

LOAEL: 500 mg/kg
Application Route: Ingestion
Exposure time: 28 d
Remarks: Based on data from similar materials

**Lactic Acid:**

Species: Rat
NOAEL: >= 886 mg/kg
Application Route: Skin contact
Exposure time: 13 w

**Aspiration toxicity**

Not classified based on available information.

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Product:**

**Ecotoxicology Assessment**

| | | |
|---|---|---|
| Chronic aquatic toxicity | : | Very toxic to aquatic life with long lasting effects. |

**Components:**

**Propylene Glycol:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Oncorhynchus mykiss (rainbow trout)): 40,613 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Ceriodaphnia Dubia (water flea)): 18,340 mg/l<br>Exposure time: 48 h |
| Toxicity to algae | : | EC50 (Skeletonema costatum (marine diatom)): 19,000 mg/l<br>Exposure time: 48 h<br>Method: OECD Test Guideline 201 |
| Toxicity to fish (Chronic toxicity) | : | Chronic Toxicity Value: 2,500 mg/l<br>Exposure time: 30 d |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Ceriodaphnia Dubia (water flea)): 29,000 mg/l<br>Exposure time: 7 d |
| Toxicity to bacteria | : | NOEC (Pseudomonas putida): > 20,000 mg/l<br>Exposure time: 18 h |

**Ethyl Alcohol:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other | : | EC50 (Daphnia magna (Water flea)): > 1,000 mg/l |

| | | |
|---|---|---|
| aquatic invertebrates | | Exposure time: 48 h |
| Toxicity to algae | : | EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201 |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Daphnia magna (Water flea)): 9.6 mg/l<br>Exposure time: 9 d |
| Toxicity to bacteria | : | EC50 (Photobacterium phosphoreum): 32.1 mg/l<br>Exposure time: 0.25 h |

**Lauric Acid:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Oryzias latipes (Japanese medaka)): 5 mg/l<br>Exposure time: 96 h<br>Method: OECD Test Guideline 203 |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 3.6 mg/l<br>Exposure time: 48 h<br>Method: OECD Test Guideline 202 |
| Toxicity to algae | : | EC50 (Selenastrum capricornutum (green algae)): > 7.6 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201<br>Remarks: No toxicity at the limit of solubility<br><br>NOEC (Selenastrum capricornutum (green algae)): > 7.6 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201<br>Remarks: No toxicity at the limit of solubility |
| Toxicity to fish (Chronic toxicity) | : | NOEC (Danio rerio (zebra fish)): 2 mg/l<br>Exposure time: 28 d<br>Remarks: Based on data from similar materials |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Daphnia magna (Water flea)): 0.47 mg/l<br>Exposure time: 21 d<br>Method: OECD Test Guideline 211 |
| Toxicity to bacteria | : | EC10 (Pseudomonas putida): > 1,000 mg/l<br>Exposure time: 30 min<br>Method: OECD Test Guideline 209 |

**Ethanolamine:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Cyprinus carpio (Carp)): 349 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 65 mg/l<br>Exposure time: 48 h |
| Toxicity to algae | : | ErC50 (Selenastrum capricornutum (green algae)): 2.8 mg/l |

Exposure time: 72 h

NOEC (Scenedesmus capricornutum (fresh water algae)): 1 mg/l
Exposure time: 72 h

Toxicity to fish (Chronic toxicity) : NOEC (Oryzias latipes (Orange-red killifish)): 1.24 mg/l
Exposure time: 41 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.85 mg/l
Exposure time: 21 d

Toxicity to bacteria : EC50 (Pseudomonas putida): 110 mg/l
Exposure time: 17 h

**Disodium Cocoamphodiacetate:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4.2 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 17.9 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Based on data from similar materials

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): 10 mg/l
Exposure time: 72 h
Method: Directive 67/548/EEC, Annex V, C.3.
Remarks: Based on data from similar materials

NOEC (Pseudokirchneriella subcapitata (green algae)): 3.2 mg/l
Exposure time: 72 h
Method: Directive 67/548/EEC, Annex V, C.3.
Remarks: Based on data from similar materials

**Lactic Acid:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 130 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 250 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Selenastrum capricornutum (fresh water algae)): 3.5 g/l
Exposure time: 72 h
Method: OECD Test Guideline 201

NOEC (Selenastrum capricornutum (fresh water algae)): 1.9

g/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to bacteria : EC50: > 100 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

**Persistence and degradability**

**Components:**

**Propylene Glycol:**

Biodegradability : Result: Readily biodegradable.
Biodegradation: 98.3 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

**Ethyl Alcohol:**

Biodegradability : Result: Readily biodegradable.
Biodegradation: 84 %
Exposure time: 20 d

**Lauric Acid:**

Biodegradability : Result: Readily biodegradable.
Biodegradation: 86 %
Exposure time: 30 d
Method: OECD Test Guideline 301D

**Ethanolamine:**

Biodegradability : Result: Readily biodegradable.
Biodegradation: > 90 %
Exposure time: 21 d

**Disodium Cocoamphodiacetate:**

Biodegradability : Result: Readily biodegradable.
Biodegradation: 79 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
Remarks: Based on data from similar materials

**Lactic Acid:**

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 67 %
Exposure time: 20 d

**Bioaccumulative potential**

**Components:**

**Propylene Glycol:**

Partition coefficient: n-octanol/water : log Pow: -1.07

**Ethyl Alcohol:**

Partition coefficient: n-octanol/water : log Pow: -0.35

**Lauric Acid:**

Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 234 - 288
Remarks: Based on data from similar materials

Partition coefficient: n-octanol/water : Pow: 4.6

**Ethanolamine:**

Partition coefficient: n-octanol/water : log Pow: -1.91

**Lactic Acid:**

Partition coefficient: n-octanol/water : log Pow: -0.6

**Mobility in soil**

No data available

**Other adverse effects**

No data available

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

## SECTION 14. TRANSPORT INFORMATION

**International Regulation**

**IATA-DGR**

| | | |
|---|---|---|
| UN/ID No. | : | UN 1170 |
| Proper shipping name | : | Ethanol solution |
| Class | : | 3 |
| Packing group | : | III |
| Packing instruction (cargo aircraft) | : | 366 |
| Packing instruction (passenger aircraft) | : | 355 |

**IMDG-Code**

| | | |
|---|---|---|
| UN number | : | UN 1170 |
| Proper shipping name | : | ETHANOL SOLUTION (Triclosan) |
| Class | : | 3 |
| Packing group | : | III |
| Labels | : | 3 |
| EmS Code | : | F-E, S-D |
| Marine pollutant | : | yes |

**National Regulations**

**TDG**

| | | |
|---|---|---|
| UN number | : | UN 1170 |
| Proper shipping name | : | ETHANOL SOLUTION |
| Class | : | 3 |
| Packing group | : | III |
| Labels | : | 3 |
| ERG Code | : | 127 |
| Marine pollutant | : | yes(Triclosan) |

## SECTION 15. REGULATORY INFORMATION

**The components of this product are reported in the following inventories:**

| | |
|---|---|
| CH INV | On the inventory, or in compliance with the inventory |
| TSCA | On TSCA Inventory |
| DSL | On the inventory, or in compliance with the inventory |
| AICS | On the inventory, or in compliance with the inventory |
| NZIoC | On the inventory, or in compliance with the inventory |
| ENCS | On the inventory, or in compliance with the inventory |
| ISHL | On the inventory, or in compliance with the inventory |
| KECI | On the inventory, or in compliance with the inventory |
| PICCS | On the inventory, or in compliance with the inventory |
| IECSC | On the inventory, or in compliance with the inventory |

**Canadian lists**

No substances are subject to a Significant New Activity Notification.

## SECTION 16. OTHER INFORMATION

**Full text of other abbreviations**

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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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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