



**EMORY**  
UNIVERSITY

**Campus Services**

**Division of Business and Administration**

# **EMORY UNIVERSITY CAMPUS SANITIZATION PLAN**

**Updated: June 16, 2020**



# OVERVIEW

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Campus Services, Building and Residential Services provides cleaning and sanitizing activities for Emory's campus.

In response to the COVID-19 pandemic, BRS has developed a Campus Sanitization strategy that will cover the sanitizing of the following areas throughout all university facilities:

- Common areas
- Lounges
- Classrooms
- Bathrooms
- Dining Spaces



# **CLEANING / SANITIZATION DETAIL**

## **Cleaning**

Normal dusting, waste removal, vacuuming, floor cleaning, etc. You can find additional detail in the Campus Services Guide to Services.

## **Cleaning High Touch Surfaces**

Cleaning high touch surfaces such as building entryways, elevator lobbies, break rooms, etc. This will be done regularly throughout the day.

## **Sanitization**

Sanitization of classrooms, congregate areas, restrooms etc. will be performed utilizing the misting sanitization product “[ProKure V.](#)” This will be performed once nightly.

## **Disinfectants**

BRS is utilizing [EPA-Registered](#) disinfectants which are approved by [EHSO](#) and in alignment with CDC guidelines.

## **Offices, Personal Spaces**

Sanitizing stations are located in facilities if occupants would like to perform additional sanitization in their offices and personal spaces.



# **CLEANING / SANITIZATION DETAIL**

## **Hand Sanitizer and Disinfecting Stations**

Campus Services teams are installing and maintaining hand sanitizer and disinfection stations in facilities. These teams are following guidelines from EHSO regarding the [recommended placement of hand sanitizer and disinfection stations.](#)

[Disinfection Matrix by Area:](#) Please reference the matrix which outlines disinfection activities by area, disinfectant, frequency, and responsible party.

## **Soap and Hand Sanitizer Products**

BRS provides the following soap and hand sanitizer solutions that are approved by EHSO and in alignment with EPA and CDC guidelines. Select the links to review the safety data sheets.

Hand Soap: [Medama Green Soap](#)

Hand Sanitizer: [Medama Foaming Hand Sanitizer](#)



# CLEANING / SANITIZATION SUMMARY

Service Type	Definition	Frequency
Sanitization – Spaces	<p>Sanitizing the following spaces: Common areas, lounges, classrooms, restrooms, dining spaces, congregate areas</p> <p>Using a misting sanitizing solution, “<a href="#">ProKure V.</a>”</p>	Once, nightly
Cleaning – High Touch Surfaces	Cleaning high-touch surfaces such as building entryways, elevator lobbies, break room, doorknobs, etc.	Regularly throughout the day
Cleaning – Routine	<p>Continuing normal cleaning routines such as dusting, waste removal, floor cleaning, etc.</p> <p>Please reference the Campus Services Guide to Services for details.</p>	See the Guide to Services, BRS Section tables for details.
Cleaning – Personal Spaces	Sanitizing stations are located in facilities if occupants would like to perform additional sanitization in their offices and personal spaces.	Occupants perform as they see fit.



# REFERENCE AND TECHNICAL GUIDES

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[Emory COVID-19 Website](#)

[Emory Campus Services Website](#)

[Emory Environmental Health and Safety Office Website](#)

[CDC](#)

[EPA Registered Disinfectants](#)



## APPENDIX: SANITIZATION/CLEANING PRODUCTS

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Sanitization Product: [ProKure V](#)

Hand Soap: [Medama Green Soap](#)

Hand Sanitizer: [Medama Foaming Hand Sanitizer](#)

# SAFETY DATA SHEET

This SDS complies with REACH 1907/2006 and 2001/58/EC, GHS, OSHA 29CFR 1910.1200

## Section 1: Chemical Product and Company Identification

CHEMICAL SUPPLIER COMPANY NAME

ProKure Solutions  
225 West Deer Valley Road  
Phoenix, AZ 85027

EMERGENCY TELEPHONE

Chemtrec 24 hrs: 800-424-9300  
Information: 623-780-2296  
Fax: 623-516-0414  
safety@prokuresolutions.com

Safety Data Sheet Competent Person:

MANUFACTURER'S NAME: ProKure Solutions  
ADDRESS: 225 West Deer Valley Road  
TELEPHONE NUMBER: 623-780-2296  
1-888-824-2918

DATE PREPARED: July 25, 2014

DATE REVIEWED: September 5, 2014

PRODUCT NAMES: **ProKure V**  
FORMULA: Mixture  
PRODUCT USE: Disinfectant/ Sanitizer/ Tuberculocide/ Virucide/ Fungicide/ Algaecide/ Slimicide/ Deodorizer

The product is designed to generate up to a 500 ppm of chlorine dioxide solution when the **ProKure V** pouch is placed in specified amount of water. The product design limits both the amount of gas generated and the rate of release into solution. The product produces chlorine dioxide gas when the contents are adequately wetted.

## Section 2: Hazards Identification

- 1. 500ppm chlorine dioxide (ClO<sub>2</sub>) solution in water:** After adding the ProKure V pouch to water, low levels of chlorine dioxide is generated and dissolved in the water. Follow usage instructions for applicable amounts of water to use.

**GHS Hazard Class**

Signal word:

Hazard Statement:

Precautionary Statements:

Prevention  
Response  
Storage

Acute Toxicity Dermal -- Category 5 No Symbol

Warning

May be harmful if in contact with skin

No Precautionary statement

Call a Poison Control center or doctor/physician if you feel unwell

No Precautionary statement

**NFPA RATINGS:**

Component	Health (Blue)	Flammability (Red)	Instability (Yellow)	Special (White)
<b>Chlorine Dioxide (ClO<sub>2</sub>):</b>	1	0	0	---

- 2. Used, reacted pouch:** Used pouch can be disposed of in general trash, municipal trash.

**NFPA RATINGS:**

Component	Health (Blue)	Flammability (Red)	Instability (Yellow)	Special (White)
<b>Used / reacted pouch</b>	0	0	0	No Water



**3. Unreacted chemical mixture inside sealed, tear resistant pouch:** *The chemical mixture inside the sealed pouch is not expected to pose a hazard unless the pouch is damaged and the powder mixture is exposed. This section specifically applies to exposure to the white granular powder mixture inside the sealed pouch.*

**GHS Hazard Class**

Acute Toxicity Oral -- Category 4  
Acute Toxicity Dermal -- Category 3  
Acute Toxicity Inhalation -- Category 3  
Skin Corrosive -- Category 1B  
Eye Corrosive -- Category 1  
Specific target organ toxicity, single exposure Category 2 (Kidney)  
Specific target organ toxicity, repeated exposure Category 2 (Blood)  
Hazardous to the Aquatic Environment—Hazard -- Category 1  
Hazardous to the Aquatic Environment—Long Term Hazard -- Category 1



**Signal word:**

**Hazard Statement:**

Danger  
Harmful if swallowed  
Toxic in contact with skin  
Toxic if inhaled  
Causes severe skin burns  
Causes serious eye damage  
May form combustible dust concentrations in air.  
May cause damage to organs (Kidney)  
May cause damage to organs (Blood) through prolonged or repeated exposure.  
Very toxic to aquatic life

**Precautionary Statements: Prevention**

Very toxic to aquatic life with long lasting effects  
Wash hands thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Avoid breathing dust/fume/gas/mist/vapours/spray  
Use only outdoors or in a well-ventilated area.

**Response**

Avoid release to the environment  
If Swallowed: Call a Poison Control center/doctor/physician if you feel unwell.  
Rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (or hair): Wash with plenty of water.  
Immediately call a Poison Control center or doctor/physician if you feel unwell.  
Take off immediately all contaminated clothing and wash it before reuse.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
Immediately call a POISON CENTER or doctor/physician.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

**Storage**

Collect spillage  
Store locked up

**Disposal**

Store in a well-ventilated place. Keep container tightly closed.  
Dispose of waste materials and container by following the waste disposal requirements of your country, state, or local authorities.

**HAZARD CLASSIFICATION:**

Classified as Hazardous based on IATA, IMDG, and DOT.

**FIRE AND EXPLOSION:**

Not applicable

**POTENTIAL HEALTH EFFECTS:**

<0 % of mixture consists of ingredients of unknown acute toxicity

**EYE CONTACT:**

Causes severe eye damage.

**SKIN CONTACT:**

Causes severe skin burns.

**INHALATION:**

Harmful if inhaled. May cause respiratory irritation.

**INGESTION:**

Harmful if swallowed.

**OTHER:**

None

**CHRONIC EFFECTS OF OVEREXPOSURE:**

None

**APPEARANCE:**

White granular powder

**NFPA RATINGS:**

Component	Health (Blue)	Flammability (Red)	Instability (Yellow)	Special (White)
<b>Unreacted chemical mixture inside sealed, tear resistant pouch</b>	3	1	0	No Water

## Section 3: Composition / Information on Ingredients

PRODUCT COMPOSITION	APPROX %	ACGI H TLV	OSHA PEL	NIOSH REL	CAS NO.	REACH	DANGER SYMBOL	R-RISK PHRASE	DSL	TSCA
TS-1	60.5	-----	-----	-----	TS	-----	-----	-----	Y	Y
Sodium Chlorite	30.5	-----	-----	-----	7758-19-2	231-836-6	-----	-----	Y	Y

Product	500 ppm ClO <sub>2</sub>	-----	-----	-----	10049-04-4	233-162-8	-----	-----	Y	Y
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Some items on this MSDS may be designated as trade secrets (TS). Bona fide requests for disclosure of trade secret information to medical personnel must be made in accordance with the provisions contained in 29 CFR 1910.1200 I 1-13. The Full List for all R phrases is shown in Section 16.

## Section 4: First Aid Measures

**INHALATION:** Remove to fresh air. If not breathing, provide CPR (cardio pulmonary resuscitation). Get immediate medical attention.

**SKIN CONTACT:** Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing.

**EYE CONTACT:** Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

**INGESTION:** If swallowed do not induce vomiting, give large quantities of water to drink. Never give anything to an unconscious person. Get immediate medical attention.

## Section 5: Fire-fighting Measures

**FLASH POINT:** Not applicable

**FLAMMABLE LIMITS IN AIR (% by vol):** Not applicable

**EXTINGUISHING MEDIA:** CO<sub>2</sub>, Dry chemical, foam, water fog,

**SPECIAL FIREFIGHTING PROCEDURES:** Self-contained breathing apparatus and full protective clothing must be worn.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** If unreacted pouch, approach fire from upwind to avoid hazardous vapors and toxic composition products. Wear self-contained breathing apparatus and protective clothing when fighting fire involving chemicals. If large amounts of products are involved in a fire, it is possible that the application of water will release high concentrations of chlorine dioxide gas into the water.

## Section 6: Accidental Release Measures

**ACTION TO BE TAKEN IF UNREACTED POUCH IS RELEASED OR SPILLED:**

- Wear proper protective equipment as specified in Section 8: Exposure Controls/Personal Protection
- Contain spill.
- Recover spill by using absorbent, mop, or towels.
- Place material into a chemical waste container.
- Eliminate all sources of ignition and ventilate area.
- Prevent spills or contaminated rinse water from entering sewers or watercourses.

**DISPOSAL METHOD:**

- Disposal of this container: Reference Section 13 of this MSDS.

## Section 7: Handling and Storage

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

- Store upright in a cool, dark, dry place.
- Keep container closed when not in use.
- Use only with adequate ventilation.
- Wear proper protective equipment when handling this material.
- Avoid contact with skin, eyes, or clothing.
- Wash hands and face after handling this material.
- Follow all applicable local regulations for handling and storage.
- Utilize chemical segregation.

### INFORMATION ON EMPTIED CONTAINER

Dispose of this container according to local, state, and federal laws in your country.

SPECIFIC USES: Disinfectant/ Sanitizer/ Tuberculocide/ Virucide/ Fungicide/ Algaecide/ Slimicide/ Deodorizer

## Section 8: Exposure Controls/Personal Protection

### VENTILATION:

Always provide good general, mechanical room ventilation where this chemical/material is used.

### RESPIRATORY PROTECTION:

No respiratory protection normally required.

Wear chemical impervious gloves at all times while working with this product. Recommended glove types include: Laminate Film, Nitrile, or Tri-polymer. Check with your company's glove supplier to ensure chemical resistance.

Safety Glasses, Chemical goggles, face shield

### PROTECTIVE CLOTHING:

Wear suitable protective clothing to prevent skin contact.

### WORK/HYGIENE PRACTICES:

Avoid breathing vapor. Avoid contact with eyes. Wash hands after handling.

## Section 9: Physical and Chemical Properties

	UNREACTED POUCH CRITERIA	PRODUCT CRITERIA
APPEARANCE - COLOR:	White	Yellow green
PHYSICAL STATE:	Powder	Liquid
ODOR:	Slight Chlorine	Chlorine
ODOR THRESHOLD	Not Available for product	0.2—1.0 PPM
PH	Not Available for product	2-3 at 8g/l
FLASH POINT:	Not Available for product	Not Available for product
LOWER EXPLOSIVE LIMIT; UPPER EXPLOSIVE LIMIT	Not Available for product	Not Available for product
FLAMMABILITY (Solid, gas)	Not Available for product	Not Available for product
EXPLOSIVE PROPERTIES	Not Available for product	Not Available for product
OXIDIZING PROPERTIES	Not Available for product	Not Available for product
SPECIFIC GRAVITY (@25 °C):	Not Available for product	~1.0 (Water)
EVAPORATION RATE:	Not Available for product	Not Available for product
% VOLATILE by VOLUME	Not Available for product	Not Available for product
PARTITION COEFFICIENT	Not Available for product	Not Available for product
AUTO IGNITION TEMPERATURE	Not Available for product	Not Available for product
DECOMPOSITION TEMPERATURE	Not Available for product	Not Available for product
BOILING POINT:	Not Available for product	Not Available for product
MELTING POINT:	Not applicable	Not applicable
VAPOR PRESSURE	Not Available for product	Not Available for product
VAPOR DENSITY (AIR = 1)	Not Available for product	2.4
SOLUBILITY IN WATER:	Complete	8 g/l at 15 °C
FREEZING POINT:	Not Available for product	Not Available for product
VISCOSITY	Not Available for product	Not Available for product
VOC CONTENT	Not Available for product	Not Available for product
RINSIBILITY	Not Available for product	Not Available for product
CORROSIVE	Not Available for product	Not Available for product
ΔH (Delta Heat of Combustion)	Not Available for product	Not Available for product

## Section 10: Stability and React Section

	UNREACTED POUCH	PRODUCT
STABILITY:	Stable under normal conditions.	Stable under normal conditions.
CONDITIONS TO AVOID:	Temperatures above 347°F (175°C), do not store dry product where exposed to moist conditions and contamination with combustible materials.	Excessive heat or contamination which could cause the product to decompose.
INCOMPATIBILITY (MATERIALS TO AVOID):	Acids, reducing agents, combustible materials, oxidizers (e.g. hypochlorites) or easily oxidizable materials	Combustibles, oxidizable organic materials, hydrogen sulfide, metallic dusts.
HAZARDOUS POLYMERIZATION:	Will not occur	Will not occur

## Section 11: Toxicological Information

GHS Required Criteria	Toxicity Criteria	Data	Comments	Chemical Constituent
Acute Toxicity	LD50 Oral Rat	506 mg/kg		Unreacted Pouch Contents
	LD50 Dermal Rabbit	315 mg/kg		Unreacted Pouch Contents
	LC50 Inhalation Rat	0.68 mg/l		Unreacted Pouch Contents
	LD50 Dermal Rabbit	>2000 mg/kg		500 ppm ClO2 Solution
Skin Corrosion/Irritation		Rabbit - Corrosive		Sodium Chlorite
Serious Eye Damage / Eye Irritation		Rabbit - Severe eye irritation	24h	Sodium Chlorite
Respiratory or Skin Sensitization		No information is available		
Germ Cell Mutagenicity		No information is available		
Carcinogenicity		No information is available		
		No information is available	NTP	
		No information is available	OSHA	
Reproductive Toxicity		No information is available		
STOST -- Single Exposure		No information is available		
STOST -- Repeated Exposure		No information is available		
Aspiration Hazard		No information is available		
Ames test		No information is available		

STOST = Specific Target Organ Systemic Toxicity

OTHER INFORMATION:

Only selected Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information.

## Section 12: Ecological Information

	Chemical Component
BIODEGRADATION:	No information is available.
BIOACCUMULATION:	No information is available.
ECO TOXICITY:	LC50 - Cyprinodon variegatus (sheepshead minnow) 177mg/l
	EC50 - Daphnia magna (Water flea) – 105 mg/l
	LC50 - Cyprinodon variegatus (sheepshead minnow) 150 g/l
	EC50 - Daphnia magna (Water flea) – 580 mg/l
	EC50 - Daphnia magna (Water flea) – .29 mg/l 48hrs
MOBILITY:	No information is available.

## Section 13: Disposal Considerations

WASTE FROM RESIDUES / UNUSED PRODUCTS / CONTAMINATED PACKAGING:

Dispose of in accordance with federal, state, and local disposal regulations.

RINSATE: Do not dispose of rinse water containing product in a storm water drainage system.

## Section 14: Transport Information

### ROAD TRANSPORT:

#### ADR = International Carriage of Dangerous Goods by Road

UN NUMBER:	UN3261
DOT PROPER SHIPPING NAME	Corrosive solid, acidic, organic, N.O.S. (Sodium Chlorite)
DOT / ADR HAZARD CLASS:	Corrosive
DOT / ADR LABELS:	Class 8
PLACARD:	Corrosive, Class 8
DOT / ADR PACKAGING GROUP:	III
Special Provisions	IB8, IP3, T1, TP33
Packaging Exception	154
Packaging Non Bulk	213
Packaging Bulk	240

### SEA TRANSPORT: IMDG

PROPER SHIPPING NAME	Corrosive solid, acidic, organic, N.O.S. (Sodium Chlorite)
UN NUMBER SEA	UN3261
CLASS:	8
PACKING GROUP:	III
EmS No.:	F-A, S-B
MARINE POLLUTANT:	Yes
SEA TRANSPORT NOTES:	None

### AIR TRANSPORT: IATA/ICAO

UN NUMBER:	UN3261
PROPER SHIPPING NAME	Corrosive solid, acidic, organic, N.O.S. (Sodium Chlorite)
HAZARD CLASS:	8
PACKAGING GROUP:	III

**General Information:** This product meets the limited quantities exception as follows: DOT/IMDG: Limited quantities up to 5.0 kg.

## Section 15: Regulatory Information

### TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS:

**This product is in compliance with rules, regulations, and/or orders of TSCA.**

### SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III SECTION 313 SUPPLIER NOTIFICATION:

This regulation requires submission of annual reports of toxic chemical(s) that appear in section 313 of the Emergency Planning and Community Right To Know Act of 1986 and 40 CFR 372. The toxic chemicals contained in this product are: None

### CALIFORNIA PROPOSITION 65:

This regulation requires a warning for California Proposition 65 chemical(s) under the statute.  
The California proposition 65 chemical(s) contained in this product are: None

### STATE RIGHT-TO-KNOW TOXIC SUBSTANCE OR HAZARDOUS SUBSTANCE LIST:

Florida Toxic Substance(s):	None
Massachusetts's hazardous substance(s):	None, Sodium Chlorite
Pennsylvania hazardous substance code(s):	TS-1, Sodium Chlorite
New Jersey	TS-1, Sodium Chlorite

Illinois  
Michigan:

None  
None

**CANADA:**

This MSDS/SDS will be non-compliant 3 years after the issue date. This MSDS contains all of the information required by the Controlled Products Regulations (CPR).

**WHMIS-INFORMATION:**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR), SOR/88-66, current to February 20, 2012. The classes of controlled products listed in the CPR, Section 32, Part IV, have been reviewed and based on Professional Judgment this product has been determined to be WHMIS controlled.

**Unreacted Pouch Contents:**

Sodium Chlorite:	C - Oxidizing material D1B - Poisonous and infectious material - Immediate and serious effects – Toxic
TS1:	E - Corrosive material

**EUROPEAN UNION:**

This product has been reviewed for compliance with the following European Community Directives: REACH 1907/2006; Directive 67/548/EEC, Regulation (EC) No 1272/2008 on classification, labeling and packaging (CLP) of substances and mixtures.

WGK: 0 (German Federal Water Management Act) (Water Hazard Class)

## **Section 16: Other Information**

**Full Text:**

**European Community Hazards Identification:**

R:	None
S:	None
Danger Symbol(s):	None

Revision Comments:	Initial version August 1, 2014
Revision Number:	0
Information Sources:	RTECS, REACH, OSHA 29CFR 1910.1200

The information presented herein has been compiled from sources considered to be dependable and is accurate to the best of ProKure Solutions' knowledge; however, ProKure Solutions makes no warranty whatsoever, expressed or implied, of MERCHANTABILITY or FITNESS FOR THE PARTICULAR PURPOSE, regarding the accuracy of such data or the results to be obtained from the use thereof. ProKure Solutions assumes no responsibility for the injury to recipient or to third persons or for any damage to any property and recipient assumes all such risks.

# SAFETY DATA SHEET

Issue Date 31-Jan-2015

Revision Date 31-Jan-2015

Version 3

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier  
Product Name Medama Green Soap

Other means of identification  
Product Code TMS8  
Synonyms None

Details of the supplier of the safety data sheet  
Medama Solutions  
1365 61 Street,  
Brooklyn, NY 11219

Emergency telephone number 973-962-1121  
Emergency Telephone Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

#### OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified

### Label elements

#### Emergency Overview

Hazard statements NA

Appearance Clear

Physical state Liquid

Odor Mild

#### Precautionary Statements - Prevention

Avoid release to the environment

#### Precautionary Statements - Response

Get medical advice/attention if you feel unwell

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

NA

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Cocamidopropyl Betaine	61789-40-0	1-5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

#### First aid measures

<b>Skin Contact</b>	Wash skin with soap and water.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Inhalation</b>	Remove to fresh air.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.

#### Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	Any additional important symptoms and effects are described in Section 11: Toxicology Information.
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#### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically.
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### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

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

**Unsuitable extinguishing media** Caution: Use of water spray when fighting fire may be inefficient.

#### Specific hazards arising from the chemical

No Information available.

#### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

#### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Ensure adequate ventilation, especially in confined areas.
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#### Environmental precautions

<b>Environmental precautions</b>	See Section 12 for additional ecological information.
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**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** None known based on information supplied.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Appropriate engineering controls**

**Engineering Controls** Showers, Eyewash stations & Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** No special technical protective measures are necessary.

**Skin and body protection** No special technical protective measures are necessary.

**Respiratory protection** No special technical protective measures are necessary.

**General Hygiene** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

**Physical state** Liquid  
**Appearance** Clear  
**Color** Water white  
**Odor** Mild  
**Odor threshold** No Information available

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
pH	6.0 - 7.0	
Specific Gravity	1.02	
Viscosity	3000 to 6000 cps/70	
Melting point/freezing point	No Information available	
Flash point	above 200F	
Boiling point / boiling range		
Evaporation rate	No Information available	
Flammability (solid, gas)		

**Flammability Limits in Air**

Upper flammability limit:	Not Applicable
Lower flammability limit:	Not Applicable
Vapor pressure	No Information available
Vapor density	No Information available
Water solubility	Complete
Partition coefficient	No Information available
Autoignition temperature	No Information available
Decomposition temperature	No Information available

**Other Information**

Density Lbs/Gal	8.51
VOC Content (%)	Not Applicable

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

Inhalation	None known.
Eye contact	Contact with eyes may cause irritation.
Skin Contact	None known.
Ingestion	Do not taste or swallow.

**Information on toxicological effects**

Symptoms	No Information available.
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**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Sensitization	No Information available.
Germ cell mutagenicity	No Information available.

**Persistence and degradability 100%**

No Information available.

**Bioaccumulation**

0%

**Other adverse effects**

No Information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

**14. TRANSPORT INFORMATION**

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

**DOT** Not regulated

**15. REGULATORY INFORMATION****International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	No
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations****U.S. EPA Label Information**

**EPA Pesticide Registration Number** NotApplicable

**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health hazards</b> 0	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and Chemical Properties</b> Yes
<b>HMIS</b>	<b>Health hazards</b> 0	<b>Flammability</b> 0	<b>Physical hazards</b> 0	<b>Personal protection</b> X

**Issue Date** 31-Jan-2015

**Revision Date** 31-Jan-2015

**Revision Note**

No Information available

**Disclaimer**

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.

**End of Safety Data Sheet**

# SAFETY DATA SHEET

Issue Date 03-Feb-2015

Revision Date 03-Feb-2015

Version 3

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product identifier**  
**Product Name** MEDAMA FOAMING HAND SANITIZER

**Other means of identification**  
**SDS#** TMS68

**Details of the supplier of the safety data sheet**  
Medama Solutions

1365 61st Street, Brooklyn NY 11219

718-492-7200 - info@acejan.com

**Emergency telephone number**  
**Emergency Telephone** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Flammable liquids	Category 2

### Label elements

#### **Emergency Overview**

#### **Hazard statements**

Harmful to aquatic life with long lasting effects  
Highly flammable liquid and vapor



**Appearance** Clear

**Physical state** Liquid

**Odor** Alcohol

#### **Precautionary Statements - Prevention**

Avoid release to the environment

#### **Precautionary Statements - Response**

Specific Treatment (See Section 4 on the SDS)

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other Information**

Unknown Acute Toxicity

71.65% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No.	Weight-%	Trade Secret
Ethanol	64-17-5	60-90	*
2-Propanol	67-63-0	1-5	*
Chlorhexidine Gluconate	18472-51-0	1-5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****First aid measures****General advice**

Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**Skin Contact**

Wash off immediately with plenty of water.

**Eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Inhalation**

Remove to fresh air.

**Ingestion**

Clean mouth with water and drink afterwards plenty of water.

**Self-protection of the first aider**

Remove all sources of ignition.

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

Any additional important symptoms and effects are described in Section 11: Toxicology Information.

**Indication of any immediate medical attention and special treatment needed****Note to physicians**

Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

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

**Unsuitable extinguishing media** Caution: Use of water spray when fighting fire may be inefficient.**Specific hazards arising from the chemical**

No Information available.

**Explosion data****Sensitivity to Mechanical Impact** None.**Sensitivity to Static Discharge** None.



**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas.

**Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep tightly closed in a dry and cool place. Keep in properly labeled containers.

**Incompatible materials** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters****Exposure Guidelines**

Exposure guidelines noted for ingredient(s).

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>
2-Propanol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m <sup>3</sup> (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m <sup>3</sup>	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> STEL: 500 ppm STEL: 1225 mg/m <sup>3</sup>

NIOSH IDLH Immediately Dangerous to Life or Health

**Other Information**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir. 1992).



**Appropriate engineering controls**

**Engineering Controls** Showers, Eyewash stations & Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** No special technical protective measures are necessary.

**Skin and body protection** No special technical protective measures are necessary.

**Respiratory protection** No protective equipment is needed under normal use conditions.

**General Hygiene** Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

<b>9. PHYSICAL AND CHEMICAL PROPERTIES</b>
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**Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid
<b>Appearance</b>	Clear
<b>Color</b>	Clear
<b>Odor</b>	Alcohol
<b>Odor threshold</b>	No Information available

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
pH	6.5 - 7.5	
Specific Gravity	.85	
Viscosity	10 cP @ 25°C	
Melting point/freezing point	No Information available	
Flash point	21 °C 70 °F	
Boiling point / boiling range	No Information available	
Evaporation rate	No Information available	
Flammability (solid, gas)		
Flammability Limits in Air		
Upper flammability limit:	Not Applicable	
Lower flammability limit:	Not Applicable	
Vapor pressure	No Information available	
Vapor density	No Information available	
Water solubility	Complete	
Partition coefficient	No Information available	
Autoignition temperature	No Information available	
Decomposition temperature	No Information available	

**Other Information**

Density Lbs/Gal	7.09
VOC Content (%)	74.5

<b>10. STABILITY AND REACTIVITY</b>
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**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	Avoid breathing vapors or mists.
<b>Eye contact</b>	No data available. Avoid contact with eyes.
<b>Skin Contact</b>	No known hazard in contact with skin.
<b>Ingestion</b>	No data available. Do not taste or swallow.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethanol 64-17-5	= 7060 mg/kg ( Rat )	Yes	= 124.7 mg/L ( Rat ) 4 h
2-Propanol 67-63-0	= 1870 mg/kg ( Rat )	= 4059 mg/kg ( Rabbit )	= 72600 mg/m <sup>3</sup> ( Rat ) 4 h

**Information on toxicological effects**

**Symptoms** No Information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No Information available.  
**Germ cell mutagenicity** No Information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Propanol 67-63-0	Yes	Group 3	Yes	X

**ACGIH (American Conference of Governmental Industrial Hygienists)**

A3 - Animal Carcinogen

**IARC (International Agency for Research on Cancer)**

Not classifiable as a human carcinogen

Group 1 - Carcinogenic to Humans

**NTP (National Toxicology Program)**

Known - Known Carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

**Reproductive toxicity** No Information available.  
**STOT - single exposure** No Information available.  
**STOT - repeated exposure** No Information available.

**Chronic toxicity** Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Contains a known or suspected reproductive toxin.

**Target organ effects** EYES, Respiratory system, Skin, Blood, Central nervous system, Liver, Reproductive System.

**Aspiration hazard** No Information available.

#### **Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 71.65% of the mixture consists of ingredient(s) of unknown toxicity

## **12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

72.65% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Ethanol 64-17-5	Yes	12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50
2-Propanol 67-63-0	1000: 96 h Desmodemus subspicatus mg/L EC50 1000: 72 h Desmodemus subspicatus mg/L EC50	9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus µg/L LC50	13299: 48 h Daphnia magna mg/L EC50
2-Phenoxyethanol 122-99-6	500: 72 h Desmodemus subspicatus mg/L EC50	337 - 352: 96 h Pimephales promelas mg/L LC50 flow-through 366: 96 h Pimephales promelas mg/L LC50 static 220 - 460: 96 h Leuciscus idus mg/L LC50 static	500: 48 h Daphnia magna mg/L EC50
Benzalkonium Chloride 8001-54-5	Yes	0.223 - 0.46: 96 h Lepomis macrochirus mg/L LC50 static 1.3: 96 h Poecilia reticulata mg/L LC50 semi-static 0.823 - 1.61: 96 h Oncorhynchus mykiss mg/L LC50 static 2.4: 96 h Oryzias latipes mg/L LC50 semi-static	Yes

### **Persistence and degradability**

No Information available.

### **Bioaccumulation**

No Information available.

Chemical Name	Partition coefficient
2-Propanol 67-63-0	0.05

**Other adverse effects** No Information available

## **13. DISPOSAL CONSIDERATIONS**

### **Waste treatment methods**

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container.



This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
2-Propanol 67-63-0	Toxic Ignitable

#### 14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

##### DOT

UN/ID No.	UN1170
Proper shipping name	Ethanol solutions
Hazard Class	3
Packing Group	II

#### 15. REGULATORY INFORMATION

##### International Inventories

TSCA	Complies
DSL/NDL	Complies

##### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

##### US Federal Regulations

##### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
2-Propanol - 67-63-0	1.0

##### SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

##### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

##### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

##### US State Regulations

##### California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
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Ethanol - 64-17-5	Carcinogen Developmental
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**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethanol 64-17-5	X	X	X
2-Propanol 67-63-0	X	X	X
2-Phenoxyethanol 122-99-6	X	Yes	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not Applicable

**16. OTHER INFORMATION**

<b>NFPA</b>	Health hazards 2	Flammability 3	Instability 0	Physical and Chemical Properties Yes
<b>HMIS</b>	Health hazards 2	Flammability 3	Physical hazards 0	Personal protection A

Issue Date 03-Feb-2015

Revision Date 03-Feb-2015

Revision Note

No Information available

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End of Safety Data Sheet