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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name SOS™ Clorox Commercial Solutions® Manual Pot and Pan Detergent

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Liquid dishwashing soap

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name The Clorox Company

Supplier Address 1221 Broadway

Oakland

CA

94612

US

Supplier Phone Number Phone: 1-510-271-7000

Emergency telephone number

Emergency Telephone Number For Medical Emergencies call: 1800-446-1014 Transportation Emergencies, call Chemtrec: 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

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

Serious eye damage/eye irritation	Category 2A
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GHS Label elements, including precautionary statements

Emergency Overview

Hazard Statements

Causes serious eye irritation



Appearance Clear Blue

Physical state Viscous liquid

Odor Lemon

Precautionary Statements - Prevention

None

Wash face, hands and any exposed skin thoroughly after handling

Wear eye/face protection

Precautionary Statements - Response

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention

Precautionary Statements - Storage

None

Precautionary Statements - Disposal

None

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

9 % of the mixture consists of ingredient(s) of unknown toxicity

Other information

Toxic to aquatic life

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms

None.

Chemical Name	CAS-No	Percent	Trade Secret
Sodium lauryl sulfate	151-21-3	7-15	*
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	3-7	*
Glycerin	56-81-5	1-5	*
Cocamine oxide	61788-90-7	1-5	*
D-Glucopyranose, oligomeric, C10-16-alkyl glycosides	110615-47-9	0.5 - 2	*
Ethanol	64-17-5	0.5 - 2	*

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

4. FIRST AID MEASURES

First aid measures

General Advice

Show this safety data sheet to the doctor in attendance.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

Skin contact

Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.

Inhalation

Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. Call a physician or Poison Control Center immediately.

Ingestion

Drink 1 or 2 glasses of water. Do not induce vomiting without medical advice. Call a physician or Poison Control Center immediately.

Self-protection of the first aider

Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects

Irritating.

Indication of any immediate medical attention and special treatment needed

Notes to Physician 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 Avoid contact with eyes.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

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

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a cool, well-ventilated place.

Incompatible products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium lauryl sulfate 151-21-3	None	None	None
D-Glucopyranose, oligomeric, decyl octyl glycosides 68515-73-1	None	None	None
Glycerin 56-81-5	TWA: 10 mg/m ³ mist	TWA: 15 mg/m ³ mist, total particulate TWA: 5 mg/m ³ mist, respirable fraction	-
Cocamine oxide 61788-90-7	None	None	None

D-Glucopyranose, oligomeric, C10-16-alkyl glycosides 110615-47-9	None	None	None
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³	IDLH: 3300 ppm 10% LEL TWA: 1900 mg/m ³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields. None required for consumer use.

Skin and body protection No special protective equipment required.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Take off contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical state	Viscous liquid	Odor	Lemon
Appearance	Clear Blue	Odor Threshold	No information available
Color	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH	7.5 - 8.5	None known	
Melting / freezing point	No data available	None known	
Boiling point / boiling range	No data available	None known	
Flash Point	No data available	None known	
Evaporation Rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limit in Air			
Upper flammability limit	No data available		
Lower flammability limit	No data available		
Vapor pressure	No data available	None known	
Vapor density	No data available	None known	
Specific Gravity	~1.0	None known	
Water Solubility	Soluble in water	None known	
Solubility in other solvents	No data available	None known	
Partition coefficient: n-octanol/water	No data available	None known	
Autoignition temperature	No data available	None known	
Decomposition temperature	No data available	None known	
Kinematic viscosity	No data available	None known	
Dynamic viscosity	~1200 cP	None known	
Explosive properties	No data available		
Oxidizing properties	No data available		

Other Information

Softening Point	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

None known.

Incompatible materials

Hazardous Decomposition Products

None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation

May cause irritation of respiratory tract.

Eye contact

May cause slight irritation.

Skin contact

Prolonged contact may cause redness and irritation.

Ingestion

Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium lauryl sulfate 151-21-3	1.29 g/kg (Rat)	580 mg/kg (Rabbit)	> 3.9 g/m ³ (Rat, 1 h)
Glycerin 56-81-5	-	> 10 g/kg (Rabbit)	>570 mg/m ³ (Rat, 1 h)
Ethanol 64-17-5	-	-	124.7 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms

May cause redness and tearing of the eyes.

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

Sensitization

No information available.

Mutagenic Effects

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
Ethanol 64-17-5	A3	Group 1	Known	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

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
Chronic Toxicity**

No information available.
Contains a known or suspected carcinogen. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage. Contains a known or suspected reproductive toxin. Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Repeated abuse can have long-term health effects.

Target Organ Effects

Blood. Central nervous system (CNS). Eyes. Liver. Reproductive system. Respiratory system.

Aspiration Hazard

No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)

7.3 mg/kg

ATEmix (dermal)

10.9 mg/kg

ATEmix (inhalation-dust/mist)

50 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic organisms. Harmful to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Sodium lauryl sulfate 151-21-3	96h EC50: 30 - 100 mg/L (Desmodesmus subspicatus) 96h EC50: = 117 mg/L (Pseudokirchneriella subcapitata) 96h EC50: 3.59 - 15.6 mg/L (Pseudokirchneriella subcapitata) 72h EC50: = 53 mg/L (Desmodesmus subspicatus)	96h LC50: 8 - 12.5 mg/L (Pimephales promelas) 96h LC50: 22.1 - 22.8 mg/L (Pimephales promelas) 96h LC50: 4.3 - 8.5 mg/L (Oncorhynchus mykiss) 96h LC50: 15 - 18.9 mg/L (Pimephales promelas) 96h LC50: = 4.2 mg/L (Oncorhynchus mykiss) 96h LC50: = 7.97 mg/L (Brachydanio rerio) 96h LC50: = 4.62 mg/L (Oncorhynchus mykiss) 96h LC50: 9.9 - 20.1 mg/L (Brachydanio rerio) 96h LC50: 4.06 - 5.75 mg/L (Lepomis macrochirus) 96h LC50: 4.2 - 4.8 mg/L (Lepomis macrochirus) 96h LC50: 5.8 - 7.5 mg/L (Pimephales promelas) 96h LC50: = 4.5 mg/L (Lepomis macrochirus) 96h LC50: 10.2 - 22.5 mg/L (Pimephales promelas) 96h LC50: 6.2 - 9.6 mg/L (Pimephales promelas) 96h LC50: 13.5 - 18.3 mg/L (Poecilia reticulata) 96h LC50: 10.8 - 16.6 mg/L (Poecilia reticulata) 96h LC50: = 1.31 mg/L (Cyprinus carpio)	EC50 = 0.46 mg/L 30 min EC50 = 0.72 mg/L 15 min EC50 = 1.19 mg/L 5 min	48h EC50: = 1.8 mg/L
Glycerin 56-81-5		LC50: 51 - 57 mL/L (96 h static) Oncorhynchus mykiss		EC50: > 500 mg/L (24 h) Daphnia magna

Ethanol 64-17-5		LC50: 12.0 - 16.0 mL/L (96 h static) Oncorhynchus mykiss LC50: 13400 - 15100 mg/L (96 h flow-through) Pimephales promelas LC50: > 100 mg/L (96 h static) Pimephales promelas	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	LC50: 9268 - 14221 mg/L (48 h) Daphnia magna EC50: 10800 mg/L (24 h) Daphnia magna EC50: 2 mg/L (48 h Static) Daphnia magna
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Persistence and Degradability

No information available.

Bioaccumulation

No information available

Chemical Name	Log Pow
Sodium lauryl sulfate 151-21-3	1.6
Glycerin 56-81-5	-1.76
Ethanol 64-17-5	-0.32

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods
Contaminated Packaging

Dispose of in accordance with federal, state and local regulations.
Do not reuse empty containers. Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT	NOT REGULATED
TDG	NOT REGULATED
ICAO	NOT REGULATED
IATA	NOT REGULATED
IMDG	NOT REGULATED

15. REGULATORY INFORMATION

International Inventories

TSCA All components are listed on the TSCA Inventory
DSL All components are listed either on the DSL or NDSL.

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

Acute Health Hazard	Yes
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. Ethyl alcohol is only a considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage.

Chemical Name	California Proposition 65
Ethanol - 64-17-5	Developmental

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Glycerin 56-81-5	X	X	X	X	
Ethanol 64-17-5	X	X	X		

International Regulations

National occupational exposure limits

Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class

D2B - Toxic materials



16. OTHER INFORMATION

NFPA	Health Hazards 2	Flammability 0	Instability 0	Physical and Chemical Hazards - Personal Protection
HMIS	Health Hazards 2	Flammability 0	Physical Hazard 0	

Prepared By Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

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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