



# SAFETY DATA SHEET

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

### Product identifier

**Product Name** Clorox Commercial Solutions® Odor Defense™ Air and Fabric Spray

### Other means of identification

**Synonyms** None

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

**Recommended use** Laundry and household bleach

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Supplier Address**

The Clorox Company  
1221 Broadway, Oakland, CA 94612  
USA  
Phone: 1-510-271-7000

### Emergency telephone number

**Emergency Phone Numbers** For Medical Emergencies, call: 1-800-446-1014  
For 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).

Skin corrosion/irritation	Category 3
Serious eye damage/eye irritation	Category 2A

**GHS Label elements, including precautionary statements**

**Emergency Overview**

<b>Signal word</b>	<b>Warning</b>		
<b>Hazard Statements</b> Causes skin irritation Causes serious eye irritation			
			
<b>Appearance</b> Clear	<b>Physical State</b> Liquid	<b>Odor</b> Floral	

**Precautionary Statements - Prevention**

Wash hands and any exposed skin thoroughly after handling.  
Wear eye protection/face protection such as safety glasses.

**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.

**Skin**

If skin irritation occurs: Get medical advice/attention.

**Precautionary Statements - Storage**

None

**Precautionary Statements - Disposal**

None

**Hazards not otherwise classified (HNOC)**

Not applicable.

**Unknown Toxicity**

Not applicable.

**Other information**

No information available.

**Interactions with Other Chemicals**

No information available.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %	Trade Secret
Ethanol	64-17-5	5-10	*
N,N-Didecyl-N,N-dimethylammonium bicarbonate	148812-65-1	0.1-1.0	*
N,N-Didecyl-N,N-dimethylammonium carbonate	148788-55-0	0.1-1.0	*

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

**4. FIRST AID MEASURES**

**First aid measures**

<b>General Advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Eye Contact</b>	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.
<b>Skin Contact</b>	Take off contaminated clothing. Rinse skin with plenty of water. If irritation develops, call a doctor.
<b>Inhalation</b>	Move to fresh air. If breathing is affected, call a doctor.
<b>Ingestion</b>	Drink a glassful of water. Call a poison control center or doctor immediately. DO NOT induce vomiting unless told to do so by a poison control center or doctor.
<b>Protection of First-aiders</b>	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

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

<b>Most Important Symptoms and Effects</b>	Stinging and irritation of eyes.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</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

**Personal Precautions** Avoid contact with eyes, skin, and clothing. Use personal protective equipment as required.

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

### Environmental precautions

**Environmental Precautions** See Section 12 for 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** Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and 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 dry, cool and well-ventilated place.

**Incompatible Products** Toilet bowl cleaners, rust removers, acids, and ammonia-containing products.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethanol 64-17-5	1000 ppm	1000 ppm	-

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 (or goggles). None required for consumer use.

**Skin and Body Protection**                      Wear rubber or neoprene gloves if there is the potential for repeated or prolonged skin contact.

**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**                              Remove and wash contaminated clothing before re-use. 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**

<b>Physical State</b>	Liquid	<b>Odor</b>	Floral
<b>Appearance</b>	Clear	<b>Odor Threshold</b>	No information available
<b>Color</b>	Clear		

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks/ Method</u></b>
pH	6.5	None known
Melting/freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	Not flammable	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
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

<b>Solubility in other solvents</b>	No data available	None known
<b>Partition coefficient: n-octanol/water</b>	No data available	None known
<b>Autoignition temperature</b>	No data available	None known
<b>Decomposition temperature</b>	No data available	None known
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	No data available	None known
<b>Explosive Properties</b>	Not explosive	
<b>Oxidizing Properties</b>	No data available	

**Other Information**

<b>Softening Point</b>	No data available
<b>VOC Content (%)</b>	No data available
<b>Particle Size</b>	No data available
<b>Particle Size Distribution</b>	No data available

**10. STABILITY AND REACTIVITY**

**Reactivity**

No information available.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

None known based on information supplied.

**Incompatible materials**

Toilet bowl cleaners, rust removers, acids, and ammonia-containing products.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Product Information**

<b>Inhalation</b>	Exposure to vapor or mist may irritate respiratory tract.
<b>Eye Contact</b>	May cause eye irritation.
<b>Skin Contact</b>	Prolonged contact may cause irritation.
<b>Ingestion</b>	Ingestion may cause irritation to mucous membranes and gastrointestinal tract, nausea, vomiting, and diarrhea.

**Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethanol 64-17-5	7,060 mg/kg Rat	No data available	20000 ppm Rat
N,N-Didecyl-N,N-dimethylammonium	245 mg/kg Rat	No data available	No data available

carbonate 148788-55-0			
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**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.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethanol 64-17-5	-	-	-	-
N,N-Didecyl-N,N-dimethylammonium carbonate 148788-55-0	-	-	-	-

*IARC (International Agency for Research on Cancer)  
Group 3 - Not Classifiable as to Carcinogenicity in Humans*

**Reproductive Toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.  
**Chronic Toxicity** Carcinogenic potential is unknown.  
**Target Organ Effects** Respiratory system, eyes, skin, gastrointestinal tract (GI).

**Aspiration Hazard** No information available.

**Numerical measures of toxicity - Product Information**

No data available

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Daphnia Magna (Water Flea)
N,N-Didecyl-N,N-dimethylammonium carbonate 148788-55-0	Cell multiplication inhibition test EC50 Species: Lemna minor (duckweed) Dose: 0.10 mg/l	Acute toxicity LC50 Species: Lepomis macrochirus (Bluegill sunfish) Concentration: 0.28 mg/l Exposure time: 96 h	Respiration inhibition EC50 Species: activated sludge Dose: 51.00 mg/l Exposure time: 3 h	Immobilization EC50 Species: Daphnia magna (Water flea) Concentration: 0.06 mg/l Exposure time: 48 h

**Persistence and Degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available.

**13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

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

**Contaminated Packaging**

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

**14. TRANSPORT INFORMATION**

**DOT** NOT REGULATED

**TDG** NOT REGULATED

**ICAO** NOT REGULATED

**IATA** NOT REGULATED

**IMDG/IMO** NOT REGULATED

**15. REGULATORY INFORMATION**

**Chemical Inventories**

**TSCA** All components of this product are either on the TSCA 8(b) Inventory or otherwise exempt from listing.

**DSL/NDSL** All components are 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

**U.S. 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>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No



**Clean Water Act**

This product does not contain substances which are regulated 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 a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

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

**International Regulations**

**Canada**

**WHMIS Hazard Class**

D2B - Toxic materials



**16. OTHER INFORMATION**

**NFPA** Health Hazard 2 Flammability 0 Instability 0 Physical and Chemical Hazards -

**HMIS** Health Hazard 2 Flammability 0 Physical Hazard 0 Personal Protection B

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

**Revision Date** New

**Revision Note** New

**Reference** Not applicable

**General 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**