CO 30966



SAFETY DATA SHEET

Issuing Date January 5, 2015 Revision Date New Revision Number 0

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

Product identifier

Product Name Clorox Commercial Solutions® Clorox® Germicidal Bleach₁

Other means of identification

EPA Registration Number 5813-100-67619

Recommended use of the chemical and restrictions on use

Recommended use Institutional hard surface disinfecting and sanitizing bleach

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address Clorox Professional Products Company 1221 Broadway Oakland, CA 94612

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 1
Serious eye damage/eye irritation	Category 1

GHS Label elements, including precautionary statements

Emergency Overview

Signal word Danger

Hazard Statements

Causes severe skin burns and eye damage

Causes serious eye damage



Appearance Clear, pale yellow

Physical State Thin liquid

Odor Bleach

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves, protective clothing, face protection and eye protection such as safety glasses

Precautionary Statements - Response

Immediately call a poison center or doctor

If swallowed: Rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

Wash contaminated clothing before reuse

If inhaled: Remove person to fresh air and keep comfortable for breathing

Specific treatment (see supplemental first aid instructions on this label)

If in eyes: Rinse cautiously with water for several minutes Remove contact lenses, if present and easy to do Continue rinsing

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

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

Hazards not otherwise classified (HNOC)

Although not expected, heart conditions or chronic respiratory problems such as asthma, chronic bronchitis, or obstructive lung disease may be aggravated by exposure to high concentrations of vapor or mist

Product contains a strong oxidizer Always flush drains before and after use

Unknown Toxicity

Not applicable

Other information

Very toxic to aquatic life with long lasting effects

Interactions with Other Chemicals

Reacts with other household chemicals such as toilet bowl cleaners, rust removers, acids, or products containing ammonia to produce hazardous irritating gases such as chlorine and other chlorinated compounds

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Sodium hypochlorite	7681-52-9	5 - 10	*

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

4. FIRST AID MEASURES

First aid measures

General Advice Call a poison control center or doctor immediately for treatment advice Show this safety

data sheet to the doctor in attendance

Eye Contact Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact

lenses, if present, after the first 5 minutes, then continue rinsing eye Call a poison control

center or doctor for treatment advice

Skin Contact Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20

minutes Call a poison control center or doctor for treatment advice

Inhalation Move to fresh air If breathing is affected, call a doctor.

Ingestion Have person sip a glassful of water if able to swallow. Do not induce vomiting unless told

to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. Call a poison control center or doctor immediately for treatment

advice

Protection of First-aiders Avoid contact with skin, eyes, and clothing. Use personal protective equipment as

required. Wear personal protective clothing (see section 8)

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and

Effects

Burning of eyes and skin

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically. Probable mucosal damage may contraindicate the use of gastric

lavage.

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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

This product causes burns to eyes, skin, and mucous membranes Thermal decomposition can release sodium chlorate and irritating gases and vapors

5. FIRE-FIGHTING MEASURES

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. Ensure adequate ventilation. Use personal

protective equipment as required. For spills of multiple products, responders should evaluate the MSDSs of the products for incompatibility with sodium hypochlorite. Breathing protection should be worn in enclosed and/or poorly-ventilated areas until hazard assessment

is complete

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

Environmental precautions

Environmental Precautions This product is toxic to fish, aquatic invertebrates, oysters, and shrimp. Do not allow

product to enter storm drains, lakes, or streams 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

Store away from children. Reclose cap tightly after each use. Store this product upright in a cool, dry area, away from direct sunlight and heat to avoid deterioration. Do not

contaminate food or feed by storage of this product.

Incompatible Products

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	
Sodium hypochlorite 7681-52-9	None	None	None	

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) or face

shield

Skin and Body Protection

Wear rubber or neoprene gloves and protective clothing such as long-sleeved shirt.

Respiratory Protection

If 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

Handle in accordance with good industrial hygiene and safety practice. Wash hands after direct contact. Do not wear product-contaminated clothing for prolonged periods

Remove and wash contaminated clothing before re-use. Do not eat, drink, or smoke when

using this product.

Bleach

No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

Odor

Odor Threshold

Remarks/ Method None known

Physical and Chemical Properties

Physical State Thin liquid Appearance Clear Color

Pale yellow

No data available

Property Values Нa ~12 No data available Melting/freezing point No data available Boiling point / boiling range Flash Point Not flammable **Evaporation rate** No data available

Flammability (solid, gas) Flammability Limits in Air

Upper flammability limit No data available Lower flammability limit No data available Vapor pressure No data available Vapor density No data available **Specific Gravity** ~1.1

Water Solubility Soluble Solubility in other solvents No data available Partition coefficient: n-octanol/waterNo data available No data available Autoignition temperature No data available **Decomposition temperature** No data available Kinematic viscosity **Dynamic viscosity** No data available

Explosive Properties Not explosive **Oxidizing Properties** No data available

Other Information

No data available Softening Point VOC Content (%) No data available **Particle Size** No data available No data available **Particle Size Distribution**

10. STABILITY AND REACTIVITY

Reactivity

Reacts with other household chemicals such as toilet bowl cleaners, rust removers, acids, or products containing ammonia to produce hazardous irritating gases, such as chlorine and other chlorinated compounds.

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 products containing ammonia.

Hazardous Decomposition Products

None known based on information supplied

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Exposure to vapor or mist may irritate respiratory tract and cause coughing Inhalation of Inhalation

high concentrations may cause pulmonary edema

Eye Contact Corrosive May cause severe damage to eyes.

May cause severe irritation to skin Prolonged contact may cause burns to skin. Skin Contact

Ingestion may cause burns to gastrointestinal tract and respiratory tract, nausea vomiting, Ingestion

and diarrhea

Component Information

Chemical Name LD50 Oral		LD50 Dermal	LC50 Inhalation	
	Sodium hypochlorite 7681-52-9	8200 mg/kg (Rat)	>10000 mg/kg (Rabbit)	-

Information on toxicological effects

May cause redness and tearing of the eyes May cause burns to eyes May cause **Symptoms**

redness or burns to skin. Inhalation may cause coughing.

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

Sensitization No information available.

Mutagenic Effects No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen Carcinogenicity

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium hypochlorite 7681-52-9	-	Group 3		-

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).

No information available **Aspiration Hazard**

Numerical measures of toxicity - Product Information

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

ATEmix (oral)

54 g/kg

ATEmix (inhalation-dust/mist)

58 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

This product is toxic to fish, aquatic invertebrates, oysters, and shrimp. Do not allow product to enter storm drains, lakes, or streams.

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 Do not contaminate food or feed by disposal of this product.

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

UN-No UN3082

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N O.S

Hazard Class 9
Packing Group III

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM

HYPOCHLORITE), 9, III, MARINE POLLUTANT

ICAO

<u>U</u>N-No UN3082

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N O.S.

Hazard Class 9
Packing Group III

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM

HYPOCHLORITE), 9, III

IATA

UN-No UN3082

ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID, NOS. **Proper Shipping Name**

Hazard Class Packing Group

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM Description

HYPOCHLORITE), 9, III

IMDG/IMO

UN3082 UN-No

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard Class Packing Group Ш F-A, S-F EmS No.

Product is a marine pollutant according to the criteria set by IMDG/IMO **Marine Pollutant**

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM Description

HYPOCHLORITE), 9, III, MARINE POLLUTANT

15. REGULATORY INFORMATION

Chemical Inventories

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

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

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances	
Sodium hypochlorite 7681-52-9	100 lb			X	

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	mical Name Hazardous Substances RQs Extremely Hazardous Substances RQs		KQ	
Sodium hypochlorite 7681-52-9	100 lb	_	RQ 100 lb final RQ RQ 45.4 kg final RQ	

EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

DANGER: CORROSIVE. Causes irreversible eye damage and skin burns. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wear protective eyewear and rubber gloves when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the restroom. Avoid breathing vapors and use only in a well-ventilated area.

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
Sodium hypochlorite 7681-52-9	Х	Х	Х	Х	
Sodium chlorate 7775-09-9	X	х	Х		

International Regulations

Canada WHMIS Hazard Class

E - Corrosive material



16. OTHER INFORMATION

NFPA Health Hazard 3 Flammability 0 Instability 0 Physical and Chemical Hazards -

HMIS Health Hazard 3 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 1081722/166081 094

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