THE CLOROX COMPANY

SAFETY DATA SHEET

Issuing Date January 5, 2015 **Revision Date** August 1, 2018 **Revision Number** 1

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

Product identifier

Product Name **Clorox® Automatic Toilet Bowl Cleaner**

Other means of identification

Synonyms None.

Recommended use of the chemical and restrictions on use

Recommended Use Toilet bowl cleaner

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

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).

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1B
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Reproductive toxicity	Category 1B
Oxidizing solids	Category 2

GHS Label elements, including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard statements
Harmful if swallowed
Causes severe skin burns and eye damage
May cause an allergic skin reaction
May damage fertility or the unborn child
May intensify fire; oxidizer

Appearance White **Physical State** Solid **Odor** Slight chlorine

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Contaminated work clothing should not be allowed out of the workplace
Keep away from heat/sparks/open flames/hot surfaces - No smoking
Keep/Store away from clothing/ other combustible materials
Take any precaution to avoid mixing with combustibles
Keep only in original container

Precautionary Statements - Response
Immediately call a POISON CENTER or doctor/physician
Specific treatment (see supplemental first aid instructions on this label)

Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician

Skin
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
If skin irritation or rash occurs: Get medical advice/attention

Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
Immediately call a POISON CENTER or doctor/physician

Ingestion
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Rinse mouth. Do NOT induce vomiting

Fire
In case of fire: Use CO2, dry chemical, or foam for extinction

Spill
Absorb spillage to prevent material damage

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Not Applicable

Unknown Toxicity
0% of the mixture consists of ingredient(s) of unknown toxicity

Other information
Toxic to aquatic life
Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Interactions with Other Chemicals
Reacts with other household chemicals such as acid toilet bowl cleaners, rust removers, acids, vinegar, and ammonia-containing products to produce hazardous gases, such as chlorine/bromine and other chlorinated/brominated compounds. Avoid contact with strong alkalis.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
2,4-Imidazolidinedione, 1-bromo-3-chloro-5,5-dimethyl-	16079-88-2	40 - 60	*
1,3-Dichloro-5,5-dimethyl hydantoin	118-52-5	20 - 30	*
Boric acid	10043-35-3	10 - 20	*
2,4-Imidazolidinedione, 1,3-dichloro-5-ethyl-5-methyl-	89415-87-2	7 - 15	*

* 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. 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. Keep eye wide open while rinsing. Do not rub affected area. Seek immediate medical attention/advice. Remove contact lenses, if applicable, and continue flushing.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes If skin irritation persists, call a physician. For severe burns, immediate medical attention is required.

Inhalation Move to fresh air. If not breathing, give artificial respiration. Administer oxygen if breathing is difficult and you are trained.

Ingestion Do NOT induce vomiting. Rinse mouth. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

Protection of First-aiders Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. Itching. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. May cause sensitization of susceptible persons.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use water. Do not use dry chemicals or foams. CO_2 or Halon may provide limited control. Flood fire area with water from a distance. Move containers from fire area if you can do it without risk. Cool containers with flooding quantities of water until well after fire is out.

Unsuitable Extinguishing Media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical
These substances will accelerate burning when involved in a fire. Some may decompose explosively when heated or involved in a fire. May ignite combustibles (wood paper, oil, clothing, etc.). Runoff may create fire or explosion hazard.

Hazardous Combustion Products
Carbon oxides.

Explosion Data
Sensitivity to Mechanical Impact No

Sensitivity to Static Discharge Yes

Protective Equipment and Precautions for Firefighters
Do not move cargo or vehicle if cargo has been exposed to heat. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor; if this is impossible, withdraw from area and let fire burn.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Attention! Corrosive material. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid dust formation. Do not breathe dust ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Refer to Section 8 Stop leak if you can do it without risk.

Other Information DO NOT GET WATER INSIDE CONTAINERS.

Environmental precautions

Environmental Precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow material to contaminate ground water system. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

Methods for Cleaning Up With clean shovel place material into clean, dry container and cover loosely; move containers from spill area. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Dike far ahead of liquid spill for later disposal. Following product recovery, flush area with water.

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. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Avoid dust formation. Fine dust dispersed in air may ignite. Wear personal protective equipment. Keep away from heat, sparks and open flame. No smoking. Do not breathe dust

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials. Keep away from heat and sources of ignition. Keep in properly labeled containers. Do not store near combustible materials. Store in accordance with the particular national regulations. Store in accordance with local regulations.

Incompatible Products Acids. Bases. Organic material. Combustible materials. Hydrocarbons.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1,3-Dichloro-5,5-dimethyl hydantoin 118-52-5	STEL: 0.4 mg/m^3 TWA: 0.2 mg/m^3	TWA: 0.2 mg/m^3	IDLH: 5 mg/m^3 TWA: 0.2 mg/m^3 STEL: 0.4 mg/m^3
Boric acid (H3BO3) 10043-35-3	TWA: 2 mg/m^3 inhalable fraction STEL: 6 mg/m^3 inhalable fraction	-	-

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 Face-shield.

Skin and Body Protection Wear protective gloves/clothing. Long sleeved clothing. Chemical resistant apron. Impervious gloves. Wear fire/flame resistant/retardant clothing.

Respiratory Protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product. For environmental protection, remove and wash all contaminated protective equipment before re-use. Do not breathe dust

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Solid		
Appearance	White	**Odor**	Slight chlorine
Color	No information available	**Odor Threshold**	No information available

Property	Values	Remarks/ Method
pH	No data available	None known
Melting/freezing point	No data available	None known
Boiling Point/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 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	No data available	None known
Water Solubility	Slight	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	No data available	None known
Explosive Properties	No data available	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available

10. STABILITY AND REACTIVITY

Reactivity
Oxidizer.

Chemical stability
Stable under recommended storage conditions. Strong oxidizer. Contact with other material may cause fire.

Possibility of Hazardous Reactions
Reacts with other household chemicals such as acid toilet bowl cleaners, rust removers, acids, vinegar, and ammonia-containing products to produce hazardous gases, such as chlorine/bromine and other chlorinated/brominated compounds.

Hazardous Polymerization
Hazardous polymerization does not occur.

Conditions to avoid
Exposure to air or moisture over prolonged periods. Excessive heat. Heat, flames and sparks. Incompatible products. Heating in air. Dust formation.

Incompatible materials
Acids. Bases. Organic material. Combustible materials. Hydrocarbons.

Hazardous Decomposition Products
Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation There is no data available for this product. Corrosive by inhalation (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of respiratory tract. Harmful by inhalation.

Eye Contact There is no data available for this product. Causes burns. (based on components). Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. May cause irreversible damage to eyes.

Skin Contact There is no data available for this product. Corrosive. (based on components) Causes burns.

Ingestion There is no data available for this product. Causes burns (based on components). Ingestion causes burns of the upper digestive and respiratory tract. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Boric acid 10043-35-3	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 0.16 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms	Redness of the skin. Burning. May cause blindness. Coughing and/ or wheezing. Itching. Rashes. Hives.

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

Sensitization	May cause sensitization of susceptible persons. May cause sensitization by skin contact. May cause sensitization by inhalation.
Mutagenic Effects	No information available.
Carcinogenicity	No information available.
Reproductive Toxicity	Contains a known or suspected reproductive toxin.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Chronic Toxicity	No known effect based on information supplied. Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Effects from this product caused by acute exposure may cause permanent damage to target organs and/or may cause chronic conditions. Contains a known or suspected reproductive toxin. Possible risks of irreversible effects.
Target Organ Effects	Respiratory system. Eyes. Skin. Gastrointestinal tract (GI). Reproductive system. Digestive System. Kidney.
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)
760.00 mg/kg
ATEmix (inhalation-gas)
7,000.00
ppm (4 hr)
ATEmix (inhalation-dust/mist)
5.01 mg/L
ATEmix (inhalation-vapor)
30.00ATEmix

12. ECOLOGICAL INFORMATION

Ecotoxicity
Toxic to aquatic organisms

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

Contaminated Packaging

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

14. TRANSPORT INFORMATION

DOT Limited Quantity.

TDG

UN-No	UN1479
Proper Shipping Name	OXIDIZING SOLID, N.O.S.
Hazard Class	5.1
Packing Group	II
Description	UN1479, OXIDIZING SOLID, N.O.S. (1-BROMO-3-CHLORO-5,5-DIMETHYL-2,4-IMIDAZOLIDINEDIONE), 5.1, II

ICAO

UN-No	UN1479
Proper Shipping Name	OXIDIZING SOLID, N.O.S.
Hazard Class	5.1
Packing Group	II
Description	UN1479, OXIDIZING SOLID, N.O.S. (1-BROMO-3-CHLORO-5,5-DIMETHYL-2,4-IMIDAZOLIDINEDIONE), 5.1, II

IATA

UN-No	UN1479
Proper Shipping Name	OXIDIZING SOLID, N.O.S.
Hazard Class	5.1
Packing Group	II
Description	UN1479, OXIDIZING SOLID, N.O.S. (1-BROMO-3-CHLORO-5,5-DIMETHYL-2,4-IMIDAZOLIDINEDIONE), 5.1, II

IMDG/IMO

UN-No	UN1479
Proper Shipping Name	OXIDIZING SOLID, N.O.S.
Hazard Class	5.1
Packing Group	II
EmS No.	F-A, S-Q
Description	UN1479, OXIDIZING SOLID, N.O.S. (1-BROMO-3-CHLORO-5,5-DIMETHYL-2,4-IMIDAZOLIDINEDIONE), 5.1, II

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
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

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	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	Yes

**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.

U.S. 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
1,3-Dichloro-5,5-dimethyl hydantoin 118-52-5	X	X	X		

International Regulations

Canada
WHMIS Hazard Class
C - Oxidizing materials
D2A - Very toxic materials
E - Corrosive material
B - Flammable/Combustible Materials

16. OTHER INFORMATION

NFPA	**Health Hazard** 3	**Flammability** 1	**Instability** 1	**Physical and Chemical Hazards** OX
HMIS	**Health Hazard** 3*	**Flammability** 1	**Physical Hazard** 1	**Personal Protection** X

Chronic Hazard Star Legend **Indicates a chronic health hazard.*

Prepared By

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

Revision Date August 1, 2018

Revision Note Updated date

Reference CLX50567-001/50657.001

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