



**Clorox Professional Products Company**  
1221 Broadway  
Oakland, CA 94612  
Tel. (510) 271-7000

## Material Safety Data Sheet

<b>I Product:</b>	COMMERCIAL SOLUTIONS® ULTRA CLOROX® GERMICIDAL BLEACH I	
<b>Description:</b>	CLEAR, LIGHT YELLOW LIQUID WITH CHLORINE ODOR	
<b>Other Designations</b>	<b>Distributor</b>	<b>Emergency Telephone Nos.</b>
EPA Reg. No. 67619-8 Sodium Hypochlorite Solution	Clorox Sales Company 1221 Broadway Oakland, CA 94612	For Medical Emergencies, call 1-800-446-1014  For Transportation Emergencies, call Chemtrec 1-800-424-8300

<b>II Health Hazard Data</b>	<b>III Hazardous Ingredients</b>		
<p><b>DANGER: CORROSIVE.</b> May cause severe irritation or damage to eyes and skin. Harmful if swallowed. The following medical conditions may be aggravated by exposure to high concentrations of vapor or mist: heart conditions or chronic respiratory problems such as asthma, chronic bronchitis, or obstructive lung disease. Some clinical reports suggest a low potential for sensitization upon exaggerated exposure to sodium hypochlorite, particularly on damaged or irritated skin. Routine clinical tests conducted on intact skin with Clorox Liquid Bleach found no sensitization in the test subjects. Under normal consumer use conditions the likelihood of any adverse health effects are low.</p> <p><b>FIRST AID:</b></p> <p><b>EYE CONTACT:</b> Rinse with plenty of water for at least 15 minutes. Get prompt medical attention.</p> <p><b>SKIN CONTACT:</b> Wash skin thoroughly with soap and water.</p> <p><b>INGESTION:</b> Drink large amounts of water. DO NOT induce vomiting. Call a physician or poison control center immediately.</p> <p><b>INHALATION:</b> If breathing problems develop, remove to fresh air.</p>	<b>Ingredient</b>	<b>Concentration</b>	<b>Worker Exposure Limit</b>
	Sodium hypochlorite CAS # 7681-62-8	6.0 - 7.35%	Not established.
	Sodium hydroxide CAS # 1310-73-2	< 0.2%	2 mg/m <sup>3</sup> TLV-STEL <sup>a</sup> 2 mg/m <sup>3</sup> PEL <sup>b</sup>
	<p><sup>a</sup>TLV-STEL = ACGIH Threshold Limit Value - Short Term Exposure Limit <sup>b</sup>PEL = OSHA Permissible Exposure Limit - Time Weighted Average</p> <p>None of the ingredients in this product are on the IARC, NTP or OSHA carcinogen list.</p>		

<b>IV Special Protection and Precautions</b>	<b>V Transportation and Regulatory Data</b>
<p><b>Hygiene Practices:</b> Wear safety glasses. With repeated or prolonged use, wear nitrile, neoprene, or butyl rubber gloves. Wash after contact with product. Avoid breathing vapors.</p> <p><b>Engineering Controls:</b> Use general ventilation to minimize exposure to vapor or mist.</p> <p><b>Work Practices:</b> Avoid eye and skin contact and inhalation of vapor or mist.</p> <p><b>KEEP OUT OF THE REACH OF CHILDREN.</b></p>	<p><b>DOT:</b> Not restricted per 49CFR172.101(e)(12)(iv).</p> <p><b>IMDG:</b> Not restricted per IMDG Code Page 0021 Paragraph 5.3.5.</p> <p><b>IATA:</b> Not restricted per IATA D.G.R. Special provision A3.</p> <p><b>EPA - SARA Title III/CERCLA:</b> This product is regulated under Sections 311/312. This product contains no chemicals regulated under Section 313 and contains sodium hypochlorite and sodium hydroxide which are regulated under Section 304/CERCLA.</p> <p><b>TSCA Status:</b> All components of this product are on the TSCA Inventory.</p>

<b>VI Spill Procedures/Waste Disposal</b>	<b>VII Reactivity Data</b>
<p><b>Spill Procedures:</b> Absorb and containize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material. For spills of multiple products, responders should evaluate the MSDS's 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.</p> <p><b>Waste Disposal:</b> Dispose of in accordance with all applicable federal, state, and local regulations.</p>	<p>Stable under normal use and storage conditions. Strong oxidizing agent. Reacts with other household chemicals such as toilet bowl cleaners, rust removers, vinegar, acids or ammonia containing products to produce hazardous gases, such as chlorine and other chlorinated species. Prolonged contact with metal may cause pitting or discoloration.</p>

<b>VIII Fire and Explosion Data</b>	<b>IX Physical Data</b>
<p>Not flammable or explosive.</p> <p>In a fire, cool containers to prevent rupture and release of sodium chlorate.</p>	<p>Boiling point.....212°F/100°C (decomposes)</p> <p>Specific gravity (H<sub>2</sub>O=1, 21°C) .....~1.10</p> <p>Solubility in water.....Complete</p> <p>pH.....~11.4</p>

**Austin's****MATERIAL SAFETY DATA SHEET****SECTION 1 -- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT NAME | Austin A-1 Bleach (Regular, Lemon, Floral)

PRODUCT CODE | 54200-00015 00021 00024 00025 00035 00040 00044 00045

ISSUE DATE | February 27, 2004

**EMERGENCY TELEPHONE NUMBERS**

MANUFACTURER | James Austin Company  
 STREET ADDRESS | 115 Downieville Road  
 CITY, STATE, ZIP | Mars, PA 16046

Medical Information: 1-866-359-5662

Transportation: 1-800-424-9300\*

\* For spill, leak, fire or transport accident emergencies.

Product Information: 1-724-625-1535

**SECTION 2 -- COMPOSITION / INFORMATION ON INGREDIENTS**

HAZARDOUS COMPONENT	CAS No.	% by wt.	OSHA PEL	EXPOSURE LIMITS	
				ACGIH TLV	NIOSH REL
Sodium hypochlorite	7681-52-9	5.25 – 5.50	None	None	None
Sodium hydroxide	1310-73-2	0.03 – 0.22	2 mg/m <sup>3</sup> TWA	2 mg/m <sup>3</sup> ceiling	10 mg/m <sup>3</sup> IDLH 2 mg/m <sup>3</sup> STEL

**SECTION 3 -- HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW** | **IRRITANT**; may cause severe skin and eye irritation or chemical burns to broken skin. Vapors extremely irritating to eyes and respiratory tract. Harmful and potentially fatal if swallowed. If mixed with other prohibited chemicals or materials, chlorine gas will be released which is also irritating to eyes, lungs, mucous membranes and in some cases can be fatal. (see Section 10 for more information)

**POTENTIAL HEALTH EFFECTS**

<b>INGESTION</b> .....	Can cause corrosion of mucous membranes, severe esophageal burns and perforation of esophagus or stomach.
<b>INHALATION</b> .....	Inhalation of vapors can cause bronchial irritation, coughing, difficulty in breathing, nausea and pulmonary edema.
<b>EYE CONTACT</b> .....	Irritating to the eyes; may cause severe and permanent damage.
<b>SKIN CONTACT</b> .....	Severe irritant; contact can produce blistering and eczema.

**MSDS**    **PRODUCT**    A-1 Bleach (Regular, Lemon, Floral)    **PAGE 2 OF 4**

### SECTION 4 -- FIRST AID MEASURES

INGESTION	If swallowed, DO NOT induce vomiting. Immediately drink a large quantity of water or milk. Do not give liquids if victim is unconscious. Do not use acidic antidotes or sodium bicarbonate (baking soda). Do not administer alcohol. <b>Call a physician or poison control center immediately.</b>
INHALATION	If exposed to excessive vapor levels, remove to fresh air and seek medical attention if cough or other symptoms develop.
EYE CONTACT	Immediately flush eye with plenty of cool, running water. Remove contact lenses if applicable, and continue flushing for at least 15 minutes. <b>Get medical attention immediately.</b>
SKIN CONTACT	Flush affected skin area with copious amounts of water and wash with soap and water. If irritation develops or persists, get medical attention. Remove clothing and wash before reuse.
NOTE TO PHYSICIAN	Information pertaining to ingestion toxicology, therapy, symptomatology and treatment can be found in <u>Clinical Toxicology of Commercial Products</u> , authored by Gosselin, Smith and Hodge and published by Williams & Wilkins, Baltimore, Maryland. <b>See listing for Hypochlorite in Therapeutics Index, Section III.</b>

### SECTION 5 -- FIRE FIGHTING MEASURES

FLASH POINT / METHOD	None / N.A.	FLAMMABLE LIMITS	Not flammable or combustible
EXTINGUISHING MEDIA	If involved in a fire, alcohol foam, carbon dioxide, dry chemical or water fog. Use extinguishing media that is appropriate for surrounding fire.		
SPECIAL FIRE FIGHTING PROCEDURES	Avoid fumes from spilled or exposed liquid. Firefighters should wear full protective clothing and OSHA/NIOSH self-contained breathing apparatus. Cool fire-exposed containers with water spray from a safe distance.		
FIRE AND EXPLOSION HAZARDS	Sodium hypochlorite bleach is a strong oxidizing agent and decomposes when heated. Decomposition products may cause containers to explode. Vigorous reactions may occur with organic materials or oxidizable materials, causing fires.		

### SECTION 6 -- ACCIDENTAL RELEASE MEASURES

RESPONSE TO SPILLS	Small spills: Dilute product by flooding area with large quantity of water and flush to sanitary sewer. Large spills: Contain run-off by diking with suitable material. Soak up liquid on inert absorbent and transfer to approved container. Prevent spill from entering sewers or waterways.
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### SECTION 7 -- HANDLING AND STORAGE

HANDLING PRECAUTIONS	Wash after handling and before eating. Use personal protective equipment and wear suitable chemical-resistant clothing. Keep container tightly closed when not in use. Follow label directions closely.
STORAGE PRECAUTIONS	Store upright in a cool (below 85 F), dry, well-ventilated area. Keep away from heat or direct sunlight. Separate from incompatible materials, such as acids, ammonia, soap-based products or organic materials. Protect containers from physical damage. <b>Keep away from children.</b>

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### SECTION 8 -- EXPOSURE CONTROLS / PERSONAL PROTECTION

HYGIENIC PRACTICES	<b>Avoid breathing vapors.</b> Do not store near food stuffs, water or feed. Protect eyes, skin and clothing from contact with this product.
ENGINEERING CONTROLS	Use local ventilation to remove vapors at the source. <b>Facilities using this product must be equipped with an eyewash station.</b>

#### PERSONAL PROTECTIVE EQUIPMENT

X	<b>RESPIRATOR</b>	Not normally necessary; use NIOSH approved respirator for concentrated vapors
X	<b>GOGGLES / FACE SHIELD</b>	Required; goggles should be chemical splash type. Face shield is best choice
X	<b>APRON</b>	Recommended to avoid skin contact and protect clothing from damage
X	<b>GLOVES</b>	Required; use impervious PVC or Neoprene with long gauntlet
X	<b>BOOTS</b>	Recommended to protect shoes and feet when using product for floor cleaning

### SECTION 9 -- PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Clear pale yellow liquid	BOILING POINT	212 deg F
ODOR	Chlorine	FREEZING POINT	28 deg F
pH	11.5 - 12.5	VAPOR PRESSURE	17.5 mm Hg @ 20 C
SPECIFIC GRAVITY	1.080	VAPOR DENSITY	Not applicable
SOLUBILITY IN WATER	Complete	EVAPORATION RATE	Not applicable

### SECTION 10 -- STABILITY AND REACTIVITY

CHEMICAL STABILITY		STABLE	X	UNSTABLE	
CONDITIONS TO AVOID	Heat or direct sunlight; temperatures above 85 F. <b>NEVER mix with solutions containing ammonia.</b>				
INCOMPATIBILITY	Acids, ammonia, ether, urea, oxidizable materials, soaps, oils, greases, phenolic disinfectants and metals (including nickel, copper, tin, aluminum and iron).				
HAZARDOUS PRODUCTS OF DECOMPOSITION	Chlorine gas -- from contact with highly acidic materials. Chloramines -- from contact with ammonia. Polychlorinated phenols -- from contact with phenolic disinfectants.				
POLYMERIZATION		WILL NOT OCCUR	X	MAY OCCUR	
CONDITIONS TO AVOID	Not applicable				

### SECTION 11 -- TOXICOLOGICAL INFORMATION

#### CARCINOGENICITY

	THIS PRODUCT CONTAINS A KNOWN OR SUSPECTED CARCINOGEN
X	<b>THIS PRODUCT DOES NOT CONTAIN ANY KNOWN OR ANTICIPATED CARCINOGENS ACCORDING TO THE CRITERIA OF THE NTP ANNUAL REPORT ON CARCINOGENS AND OSHA 29 CFR 1910, Z</b>

#### OTHER EFFECTS

<b>ACUTE</b>	Toxicity arises from corrosive activity; stems from oxidizing potency, a function of concentration
<b>CHRONIC</b>	Not determined

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### SECTION 12 -- ECOLOGICAL INFORMATION

BIODEGRADABILITY	<input type="checkbox"/>	CONSIDERED BIODEGRADABLE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NOT BIODEGRADABLE
BOD / COD VALUE	Not established				
ECOTOXICITY	No data available				

### SECTION 13 -- DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD	If in accordance with an NPDES permit or approved by local sewage treatment plant authority, small amounts may be flushed to a sanitary sewer with plenty of water. Large amounts of unused product must be disposed of as hazardous waste at an approved hazardous waste management facility.							
RCRA CLASSIFICATION	Hazardous, corrosive D002 (if pH is equal to or greater than 12.5)							
RECYCLE CONTAINER	<input type="checkbox"/>	YES	<input checked="" type="checkbox"/>	X	CODE	2 - HDPE	<input type="checkbox"/>	NO

### SECTION 14 -- TRANSPORT INFORMATION

DOT CLASSIFICATION	<input type="checkbox"/>	HAZARDOUS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NOT HAZARDOUS
DOT Proper Shipping Name	Hypochlorite Solution				
Hazard Class	8				
Identification Number	UN 1791				
Packing Group	III				
Label/Placard	Corrosive				
RQ	Sodium Hypochlorite 100 lbs. (45.4Kg)				
EXCEPTIONS	Consumer Commodity, ORM-D. Exempted by DOT for containers of 1 gallon or less				

### SECTION 15 -- REGULATORY INFORMATION

#### REGULATORY STATUS

<input type="checkbox"/>	EPA REGISTERED (UNDER FIFRA)	
<input type="checkbox"/>	FDA REGULATED	
<input checked="" type="checkbox"/>	KOSHER	
<input type="checkbox"/>	SARA TITLE III MATERIAL	
<input type="checkbox"/>	NSF AUTHORIZED	

### SECTION 16 -- OTHER INFORMATION

#### NFPA CLASSIFICATION

2	BLUE	HEALTH HAZARD
0	RED	FLAMMABILITY
0	YELLOW	REACTIVITY
COR	WHITE	SPECIAL HAZARD

#### Approved Specifications

Federal Specification O-S-602E  
Commercial Item Description A-1427C

Information contained in this MSDS refers only to the specific material designated and does not relate to any process or use involving other materials. This information is based on data believed to be reliable, and the Product is intended to be used in a manner that is customary and reasonably foreseeable. Since actual use and handling are beyond our control, no warranty, express or implied, is made and no liability is assumed by James Austin Company in connection with the use of this information.