

Tanner/MELER

**QUALITY ASSURANCE DEPARTMENT
MATERIAL SAFETY DATA SHEET***

MSDS NUMBER: 03 089 2289 Liq Chlorine Bleach.doc
EFFECTIVE DATE: 12/1/98

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ULTRA SECTION I - PRODUCT IDENTIFICATION	
PRODUCT NAME	BLEACH, LIQUID CHLORINE (REG, FRESH SCENT, LEMON SCENT)
CHEMICAL NAME	SODIUM HYPOCHLORITE SOLUTION

SECTION II - HAZARDOUS INGREDIENTS			
INGREDIENT	CAS #	PERCENT	EXPOSURE LIMITS
SODIUM HYPOCHLORITE	7681-52-9	5.25	PEL N/A
SODIUM HYDROXIDE (CAUSTIC SODA)	1310-73-2	0.1-0.2	TLV N/A 2mg/m ³ 2mg/m ³

SECTION III - PHYSICAL & CHEMICAL PROPERTIES	
BOILING POINT	212°F
MELTING POINT	N/A
SPECIFIC GRAVITY	1.08
VAPOR PRESSURE (mm Hg)	SAME AS WATER
VAPOR DENSITY	N/A
% VOLATILE BY VOLUME	N/A
EVAPORATION RATE	N/A
pH	11.5 - 12.5
SOLUBILITY IN WATER	100%
VISCOSITY	N/A
APPEARANCE & ODOR	CLEAR, PALE YELLOW OR GREENISH LIQUID WITH CHLORINE ODOR & SCENT

SECTION IV - FIRE & EXPLOSION PROPERTIES	
FLASH POINT IN °F (METHOD)	>3000°F (CLOSED CUP)
FLAMMABLE LIMITS (% VOLUME IN AIR)	UPPER: N/A LOWER: N/A
FIRE EXTINGUISHING MEDIA	WATER, CO ₂ , DRY CHEMICAL, ALCOHOL FOAM
SPECIAL FIRE FIGHTING PROCEDURES	WEAR MSHA/NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL-FACE SHIELD AND PROTECTIVE CLOTHING.
UNUSUAL FIRE & EXPLOSION HAZARDS	PRODUCT DECOMPOSES WHEN HEATED, RELEASING CHLORINE GAS AND OXYGEN, WHICH MAY CAUSE CONTAINERS TO EXPLODE.
TOXIC GASES	CHLORINE GAS

* Meets Federal OSHA communication standard 29 CFR 1910.1200

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SECTION V - HEALTH HAZARD INFORMATION (SYMPTOMS)	
INHALATION	IRRITATION, COUGHING, DIFFICULTY BREATHING, AND PULMONARY EDEMA.
INGESTION	SEVERE BURNS TO MOUTH AND THROAT, MUCOUS MEMBRANES AND STOMACH, AND TISSUES. ABDOMINAL PAIN, NAUSEA, VOMITING, CIRCULATORY COLLAPSE, CONFUSION, DELIRIUM, COMA, AND COLLAPSE. SWALLOWING LARGE QUANTITIES CAN CAUSE DEATH.
SKIN	SEVERE IRRITATION INCLUDING BURNS AND DESTRUCTION OF TISSUES.
EYES	SEVERE IRRITATION INCLUDING BURNS AND DESTRUCTION OF TISSUES.
CARCINOGENICITY	NONE

SECTION VI - HEALTH HAZARD INFORMATION (FIRST AID)	
INHALATION	REMOVE VICTIM TO FRESH AIR. PROVIDE SYMPTOMATIC AND SUPPORTIVE CARE. SEEK IMMEDIATE MEDICAL ATTENTION.
INGESTION	SEEK IMMEDIATE MEDICAL ATTENTION.
SKIN	REMOVE CONTAMINATED CLOTHING. FLUSH AFFECTED SKIN AREA WITH CONTINUOUS RUNNING WATER. SEEK IMMEDIATE MEDICAL ATTENTION.
EYES	FLUSH EYES WITH CONTINUOUS RUNNING WATER. SEEK IMMEDIATE MEDICAL ATTENTION.

SECTION VII - STABILITY & REACTIVITY	
STABILITY	STABLE
CONDITIONS TO AVOID	HEAT OR DIRECT SUNLIGHT
INCOMPATIBILITY TO OTHER SUBSTANCES	ACIDS, AMMONIAS, OILS, GREASES, HEAVY METALS, AND ETHER.
HAZARDOUS BYPRODUCTS	CHLORINE GASES, OXYGEN
HAZARDOUS POLYMERIZATION	NONE

SECTION VIII - HANDLING & STORAGE	
FOLLOW LABEL INSTRUCTIONS FOR PROPER HANDLING AND STORAGE. AVOID PROLONGED EXPOSURE AND DIRECT CONTACT WITH RESPIRATORY TRACT, SKIN, AND EYES. USE ONLY IN WELL-VENTILATED AREA AND WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES, EYE SHIELDS, AND APPROPRIATE BREATHING MASK AS NECESSARY.	

SECTION IX - SPILL & DISPOSAL PROCEDURES	
SPILL CONTAINMENT AND DISPOSAL PROCEDURES VARY WITH EACH MUNICIPALITY. CHECK WITH YOUR LOCAL AGENCY TO ASSURE COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.	

SECTION X - DISTRIBUTOR INFORMATION	
TOPCO ASSOCIATES, INC. SKOKIE, IL 60077-2697 QUALITY ASSURANCE DEPARTMENT (847) 676-3030	

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