

<b>Material Safety Data Sheet</b>	
<b>IDENTITY</b> <b>LIQUI-PAK®</b> <b>CHLORINE BLEACH</b>	
Section I	
Manufacturer's Name Scientific Packaging Corp	Emergency Telephone Number (973) 676-3107
Address 2-8 Central Avenue P.O. Box 1016 East Orange, NJ 07018-1016	Telephone Number for Information (973) 676-3107
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## Section II – Hazardous Ingredients/Identity Information

CAS #	Hazardous Components	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
7681-52-9	Sodium Hypochlorite	3 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>	Not Available	5-6

## Section III – Physical/Chemical Characteristics

Boiling Point	212°F/100°C decomposes	Specific Gravity (H <sub>2</sub> O = 1)	1.08
Vapor Pressure (mm Hg)	Not available	Melting Point	Not applicable
Vapor Density (Air = 1)	Not available	Evaporation Rate (Butyl Acetate = 1)	Not available
pH	11-12		
Solubility in Water	complete		
Appearance and Odor	Clear, light yellow liquid with chlorine odor		

## Section VI – Fire and Explosion Data

Boiling Point (Method Used)	Flammable Limits	LEL	UEL
212°F/100°C decomposes	Does not burn under normal conditions	Not applicable	Not applicable

**Extinguishing Media** Use water spray, dry chemical, foam or carbon dioxide, as suitable for surrounding fire.

**Special Fire Fighting Procedures**

Wear self-contained breathing apparatus and protective clothing appropriate for fighting a typical chemical fire.

**Unusual Fire and Explosion Hazards**

When in contact with other chemicals such as acids, ammonia, reducing agents and organics, product may release chlorine and other gases.

## Section V – Reactivity Data

Stability	Unstable	Conditions to Avoid
	Stable X under normal consumer use and storage conditions	Keep product away from sunlight and heat. Keep product away from contact with metals, except titanium
Incompatibility (Materials to Avoid)		Strong acids, reducing agents, ammonia, organics, and most metals
Hazardous Decomposition or Byproducts		Product may corrode metals and release oxygen gas
Hazardous Polymerization	May Occur	Conditions to Avoid
	Will Not Occur X	Not Applicable

## Section VI – Health Hazard Data

Route(s) of Entry	Inhalation	Yes	Skin/Eye	Yes	Ingestion	Yes
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**Health Hazard (Acute and Chronic)**

**Acute** - Inhalation may cause severe irritation and damage to nose, throat, nasal passages and lungs. Ingestion may cause severe irritation and damage to mouth, throat and stomach, vomiting and diarrhea. Contact with skin may cause burns and tissue destruction. Contact with eyes may cause severe irritation and irreversible damage.

**Chronic** - Prolonged skin or eye contact may cause severe irritation and irreversible damage.

<b>Carcinogenicity</b>	NTP Not Listed	IRAC Monographs Not Listed	OSHA Regulated	Not Listed
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**Signs and Symptoms of Exposure**

Irritation to respiratory tract and lungs. Irritation to skin and eyes. Nausea.

**Medical Conditions Generally Aggravated by Exposure**

Heart condition, respiratory problems such as asthma, chronic bronchitis or obstructive lung disease

**Emergency and First Aid Procedures**

**Inhalation:** Remove source of contamination or move victim to fresh air. Obtain medical attention if irritation continued.

**Skin contact:** Remove contaminated clothing and footwear for cleaning. Wash contaminated skin gently and thoroughly with water for 20 minutes or until chemical is removed. Obtain medical advice if irritation persisted.

**Eye contact:** Immediately flush contaminated eye(s) with lukewarm gently flowing water while holding eyelid open, for 20 minutes or until chemical is removed. Obtain medical attention quickly.

**Ingestion:** Give victim sips of water or milk. Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Obtain medical attention immediately.

**Section VII - Precautions for Safe Handling and Use****Steps to Be Taken in Case Material is Released or Spilled**

Stop spill at source and contain material. Material will corrode metal and may release gases when contaminated. Collect material in vented plastic container for disposal in accordance with local, state and federal regulations.

**Waste Disposal Method**

Small household amounts of material may be diluted with large amount of water and flushed to appropriate (e.g. sanitary) sewer. Dispose of large amounts of properly contained contaminated material in accordance with local, state and federal regulations.

**Precaution to Be Taken in Handling and Storing**

Keep product in cool and dark conditions. Do not expose product to direct sunlight. **CORROSIVE** Keep product away from eye and skin contact, or clothing.

**Other Precautions**

Keep product away from contact with strong acids, ammonia, reducing agents, organics and most metals including steel and stainless steel.

**Section VIII - Control Measures****Respiratory Protection**

None required under normal use conditions.

**Ventilation**

Local Exhaust - None required with normal consumer use.

Mechanical (General) - Where necessary - e.g. industrial setting, use appropriate ventilation equipment/system to protect against vapor or mist during handling.

Special - None

Other - None

**Protective Gloves**

None required with normal consumer use. Avoid product contact with skin.

**Eye Protection**

Wear safety glasses or goggles to protect against product splashes and spills. Avoid product contact with eyes.

**Other Protective Clothing or Equipment**

None required with normal consumer use. Rubber apron and rubber/latex gloves may be worn for protection against product splashes or spills. Personal protective equipment may be required under industrial conditions - see Work/Hygiene Practices.

**Work/Hygiene Practices** - Observe general industrial hygiene practices - e.g. hand/skin washing and clothing change. Use adequate ventilation when handling product. Avoid skin and eye contact with product. For protection against fumes and mist, and skin and eye contact conditions, wear goggles or face shield, NIOSH approved respirator with organic vapor acid gas cartridge and dust/fume/mist filter, rubber/latex gloves and/or disposable suits.

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