



# SODIUM HYPOCHLORITE SOLUTION MATERIAL SAFETY DATA SHEET

## Section 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>MANUFACTURER'S NAME:</b> CARUS CORPORATION	<b>TELEPHONE NUMBER:</b> (815) 223-1500 <b>Web:</b> <a href="http://www.caruschem.com">www.caruschem.com</a>
<b>MANUFACTURING FACILITY:</b> Carus Corporation 1500 Eighth Street P. O. Box 1500 LaSalle, IL 61301	<b>EMERGENCY TELEPHONE NO.</b> (800) 435 - 6856 (USA) (815) 223 -1500 (other countries) <b>CHEMTREC® TELEPHONE NO.</b> (800) 424-9300 (USA)

## Section 2. IDENTIFICATION

<b>PRODUCT NAME:</b>	Sodium Hypochlorite	<b>REVISION DATE:</b>			
<b>CHEMICAL NAME:</b>	Sodium Hypochlorite	<b>FORMULA:</b> NaOCl			
<b>SYNONYMS:</b>	Bleach, soda bleach, and chlorine bleach	<b>PACKING GROUP:</b> III			
<b>D.O.T. HAZARD CLASS:</b>	8	<b>UN NO.</b>	1791	<b>CAS NO.</b>	7681-52-9
<b>D.O.T. SHIPPING NAME: (for packages that contain less than 100 lbs of this product)</b>	Hypochlorite solutions				
<b>D.O.T. SHIPPING NAME: (for packages that contain more than 800 lbs of this product)</b>	Hypochlorite solutions, RQ				

## Section 3. PHYSICAL DATA

<b>PHYSICAL STATE:</b> Bright yellow to yellow-green liquid with chlorine odor.	<b>SPECIFIC GRAVITY AT 60° F:</b> 1.20-1.21	<b>pH:</b> 12.5-13.5
<b>BOILING POINT AT, °F:</b> >212° F (100° C)	<b>SOLUBILITY IN WATER:</b> Soluble	
<b>FREEZING POINT AT, °F:</b> -11	<b>VOLATILES VOLUME %:</b> Variable – water vapor plus products of decomposition.	
<b>VAPOR PRESSURE:</b> Vapor pressure of water plus vapor pressure of decomposition product.	<b>EVAPORATION RATE:</b> Not established.	

## Section 4. HAZARDOUS COMPONENTS GREATER THAN 1%

MATERIAL	OSHA PEL	ACGIH TLV	CAS.NO.	%
Sodium Hypochlorite	0.5 ppm (TWA), 1ppm (STEL) as chlorine	1.0 ppm (TWA), 3 ppm (STEL) as chlorine	7681-52-9	5.50-15.60
<b>CARCINOGENICITY:</b>	Not considered carcinogenic by IARC, NTP or OSHA.			

## Section 5. FIRE AND EXPLOSIVE HAZARD DATA

<b>FLASH POINT:</b>	Not Applicable.
<b>NORMAL EXTINGUISHING AGENT:</b>	Use agent, which is appropriate for surrounding fire. Use water spray to cool fire-exposed containers, to dilute liquid, and control vapor.
<b>SPECIAL FIRE FIGHTING PROCEDURES:</b>	Avoid fumes from spilled or exposed liquid, dilute with large quantities of water, ventilate, and be prepared to use respiratory protection if needed. Acid contamination will produce irritating fumes similar to chlorine gas.



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<b>UNUSUAL FIRE AND EXPLOSION HAZARDS:</b>	Sodium hypochlorite decomposes with heat: decomposition products may cause containers to rupture or explode. Vigorous reaction possible with organic materials or oxidizing agents; may result in a fire.
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### Section 6. REACTIVITY DATA

<b>STABILITY:</b>	Stable below 10%.	<b>CONDITIONS TO AVOID:</b>	Contamination
<b>INCOMPATIBILITY (materials to avoid):</b>	Contamination with heavy metals, reducing agents, organics, ether, ammonia and acids.		
<b>HAZARDOUS COMBUSTION / DECOMPOSITION PRODUCTS:</b>	Hypochlorous acid, chlorine and hydrochloric acid. Combustion depends upon temperature and decrease in pH.		

### Section 7. HEALTH HAZARD DATA

ACUTE EFFECTS OF EXPOSURE	
<b>INGESTION:</b>	May cause irritation of membranes of the mouth, throat, and stomach pain and possible ulceration.
<b>SKIN CONTACT:</b>	Irritant, reddening of the skin and skin damage.
<b>INHALATION:</b>	Fumes are very irritating to mucous membranes.
<b>EYE CONTACT:</b>	Severe irritation.
<b>CHRONIC EFFECTS OF EXPOSURE:</b>	Constant irritant to eyes and throat.
<b>OTHER HEALTH DATA:</b>	Irritating effects increase with strength of solution and time of exposure.

### EMERGENCY AND FIRST AID PROCEDURES

<b>INGESTION:</b>	If swallowed, <b>DO NOT INDUCE VOMITING!</b> Give large quantities of water or milk. Never give anything by mouth to an unconscious person. Get medical help immediately.
<b>EYES:</b>	Immediately flush eyes (holding eyelids apart) with plenty of water for at least 15 minutes and get medical attention immediately.
<b>INHALATION:</b>	Remove to fresh air. Give artificial respiration only if breathing has stopped. Administer oxygen until victim breathes easily. Keep warm and at rest. Get immediate medical attention.
<b>SKIN:</b>	Flush exposed area with water for at least 15 minutes. Under running water, remove contaminated clothing and shoes. If irritation persists, repeat flushing. Get immediate medical attention. Completely decontaminate clothing before re-use and destroy contaminated shoes.

### Section 8. SPILL OR LEAK PROCEDURES

<b>STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:</b>	Dike the area to prevent material from entering waterway and dilute with water if possible. Avoid heat and contamination with acid materials. Do not use combustible material such as sawdust to absorb sodium hypochlorite. Reduce with agents such as bisulfites or ferrous salt solutions-some heat will be produced. Keep on alkaline side.
<b>WASTE DISPOSAL METHOD:</b>	Disposal of all materials shall be in full and strict compliance with all federal, state, and local regulations.

### Section 9. SPECIAL PROTECTION INFORMATION

<b>RESPIRATORY PROTECTION:</b>	Approved NIOSH/MSHA respirator.		
<b>PROTECTIVE GLOVES:</b>	Rubber or Plastic	<b>EYE PROTECTION:</b>	Chemical safety goggles.
<b>VENTILATION:</b>	Well-ventilated area.	<b>SPECIAL EQUIPMENT:</b>	Rubber apron, rubber boots, eyewash fountain, safety shower.



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## Section 10. SPECIAL PRECAUTIONS

<b>HANDLING AND STORAGE:</b>	Store in cool, dry, ventilated area. Store away from direct sunlight. Protect container from physical damage.
<b>OTHER:</b>	None known.

## Section 11 OTHER INFORMATION

<b>Revised Date:</b> None
<b>Supercedes:</b> None

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