



CHEM078

RY SCHOOLS

715 S.E. 6th Ave.
Hillsboro, OR 97123

MATERIAL SAFETY DATA SHEET

OT 0059

A. A.I. General Information

Chemical Name & Synonyms <i>Sodium Hypochlorite Solution 5½%</i>	Trade Name & Synonyms <i>Master X Bleach</i>
Chemical Family <i>Alkali</i>	Formula <i>NaOCl • 17H₂O</i>
Proper DOT Shipping Name <i>HYPOCHLORITE SOLUTION</i>	DOT Hazard Classification <i>ORM-B</i>
Manufacturer <i>Master Chemical</i>	Manufacturer's Phone Number <i>503-288-6837</i>
Manufacturer's Address <i>642 N Tillamook St. Portland, Oregon</i>	Chemtrec Phone Number <i>800-424-9300</i>

II. Ingredients

Principal Hazardous Components	Percent	Threshold Limit Value (units)
<i>Chlorine</i>	<i>5.25% - 5.55%</i>	<i>3 mg / m³</i>
<i>Sodium Hydroxide</i>	<i>.3% or less</i>	<i>2mg / m³</i>

III. Physical Data

Boiling Point (°F) <i>212°F</i>	Specific Gravity (H ₂ O = 1) <i>1.04 @ 20°C</i>
Vapor Pressure (mm Hg.) <i>less than H₂O</i>	Percent Volatile By Volume (%) <i></i>
Vapor Density (Air = 1) <i>N/A</i>	Evaporation Rate (____ = 1) <i>.05% - 1% / 90 days @ 40°</i>
Solubility in Water <i>100%</i>	pH <i>12.8</i>
Appearance & Odor <i>yellow-green liquid- chlorine odor</i>	

IV. Fire & Explosion Hazard Data

Flash Point (Test Method) <i>Does not flash</i>	Auto Ignition Temperature <i>does not autoignite</i>	
Flammable Limits <i>Is not flammable</i>	LEL <i>n/a</i>	UEL <i>n/a</i>
Extinguishing Media <i>Water, carbon dioxide, foam.</i>		
Special Fire Fighting Procedures <i>Wear self contained breathing apparatus- water solution may be corrosive and chlorine gas may be present.</i>		
Unusual Fire & Explosion Hazards <i>Reaction with ammonia may form nitrogen trichloride (an unstable explosive). Reaction with acids may result in the formation of chlor. gas. Reaction with wood or other organics may evolve oxygen.</i>		

V. Health Hazard Data

Threshold Limit Value <i>Chlorine gas - 1ppm</i>	OSHA Threshold Limit Value <i>same</i>	ACGIH Threshold Limit Value <i>same</i>
Carcinogen - NTP Program <i>Not considered carcinogenic by either agency</i>		Carcinogen - IARC Program
Symptoms of Exposure <i>Burning and irritation of affected tissues.</i>		
Medical Conditions Aggravated By Exposure <i>Some asthma can be aggravated by over exposure.</i>		
Primary Route(s) of Entry <i>Inhalation, eyes, skin contact, ingestion.</i>		
Emergency First Aid INHALATION: <i>evacuate to fresh air - if not breathing, give artificial respiration - GET MEDICAL ATTENTION.</i> INGESTION: <i>give milk, egg white or milk of magnesia - Do Not Induce Vomiting. GET MEDICAL ATTENTION.</i>		
EYES: <i>flush with water at least 15 minutes - GET MEDICAL ATTENTION</i>		
SKIN: <i>wash thoroughly with water - if burned or irritated -GET MEDICAL ATTENTION</i>		

VI. Reactivity Data

Stability	☒	☐ Unstable ☐ Stable	Conditions To Avoid <i>Heat - exposure to light</i>
Incompatibility			Materials To Avoid <i>Ammonia, Acids, organic material, reducing agents.</i>
Hazardous		☐ May Occur	Conditions To Avoid
Polymerization	☒	☐ Will Not Occur	
Hazardous Decomposition Products <i>Chlorine gas - possible oxygen.</i>			

VII. Environmental Protection Procedures

Spill Response	<i>Contain and neutralize with soda ash or sodium sulfite and dispose in manner permitted by local authorities.</i>
Waste Disposal Method	<i>Wash area with water and flush to drain IF permitted by authorities.</i>

VIII. Special Protection Information

Eye Protection <i>goggles or full face mask</i>	Skin Protection <i>rubber or plastics</i>
Respiratory Protection (Specific Type) <i>Self contained breathing apparatus if in confined area.</i>	Ventilation Recommended <i>mechanical fan.</i>
Other Protection	

IX. Special Precautions

Hygienic Practices In Handling & Storage <i>Wash with ordinary hand soap and flush with water.</i>	
Precautions For Repair & Maintenance Of Contaminated Equipment <i>Flush with water and ordinary soap.</i>	
Other Precautions	