



Material Safety Data Sheet

Section 1. Product and Company Identification

Product Name	Sodium Hypochlorite 6%	Product Code	VW3248
Manufacturer	EMD Chemicals Inc. P.O. Box 70 480 Democrat Road Gibbstown, NJ 08027 Prior to January 1, 2003 EMD Chemicals Inc. was EM Industries, Inc. or EM Science, Division of EM Industries, Inc.	Effective Date	5/20/2005
		Print Date	5/20/2005

For More Information Call

856-423-6300 Technical Service
Monday-Friday: 8:00 AM - 5:00 PM

In Case of Emergency Call

800-424-9300 CHEMTREC (USA)
613-996-6666 CANUTEC (Canada)
24 Hours/Day: 7 Days/Week

Synonym	Bleach
Material Uses	Laboratory Reagent
Chemical Family	Inorganic salt solution.

Section 2. Composition and Information on Ingredients

Component	CAS #	% by Weight
Sodium Hypochlorite	7681-52-9	6
Water	7732-18-5	94

Section 3. Hazards Identification

Physical State and Appearance	Liquid.
Emergency Overview	DANGER ! CORROSIVE! VAPOR HARMFUL HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED. CAUSES RESPIRATORY TRACT, EYE AND SKIN BURNS.
Routes of Entry	Absorbed through skin. Dermal contact. Inhalation. Ingestion.
Potential Acute Health Effects	
<i>Eyes</i>	Hazardous in case of eye contact (corrosive). Causes eye burns.
<i>Skin</i>	Hazardous in case of skin contact (permeator, corrosive). Skin contact produces burns.
<i>Inhalation</i>	Hazardous in case of inhalation (lung corrosive).
<i>Ingestion</i>	Hazardous in case of ingestion.

Potential Chronic Health Effects

Carcinogenic Effects This material is not known to cause cancer in animals or humans.

Additional information See Toxicological Information (section 11)

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Medical Conditions Aggravated by Overexposure:	Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.
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Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion	If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flammability of the Product	Non-flammable.
Auto-ignition Temperature	Not applicable.
Flash Points	Not applicable.
Flammable Limits	Not applicable.
Products of Combustion	Not applicable.
Fire Hazards in Presence of Various Substances	Not applicable.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of static discharge: No. Risks of explosion of the product in presence of mechanical impact: No.
Fire Fighting Media and Instructions	Not applicable.
Protective Clothing (Fire)	Not applicable.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Contact with acid liberates highly toxic chlorine gas. (Sodium Hypochlorite)

Section 6. Accidental Release Measures

Small Spill and Leak	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
Large Spill and Leak	Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Spill Kit Information

The following EMD Chemicals Inc. SpillSolv (TM) absorbent is recommended for this product:
SX1320 Caustic Treatment Kit

+ Section 7. Handling and Storage

Handling Avoid contact with eyes, skin and clothing. Do not ingest. Do not breathe vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Storage Keep container tightly closed. Keep container in a cool, well-ventilated area. Store in refrigerator. Store at 2-8°C

Section 8. Exposure Controls/Personal Protection

Engineering Controls Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection

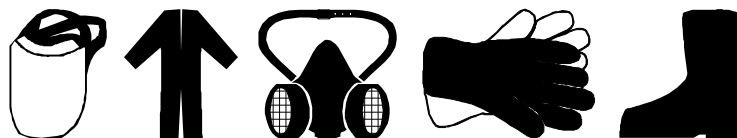
Eyes Face shield.

Body Full suit.

Respiratory Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Hands Gloves.

Feet Boots.

Protective Clothing (Pictograms)**Personal Protection in Case of a Large Spill**

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Product Name

Sodium Hypochlorite

Exposure Limits

AIHA WEEL (United States, 2000).

STEL: 2 mg/m³ 15 minute(s).

Water

Not available.

Section 9. Physical and Chemical Properties

Odor Chlorine like odour

Color Clear. Colorless to light yellow.

Physical State and Appearance Liquid.

Molecular Weight Not applicable.

Molecular Formula Not applicable.

pH Not available.

Boiling/Condensation Point The lowest known value is 99.9°C (211.8°F) (Water).

Melting/Freezing Point May start to solidify at -0.1°C (31.8°F) based on data for: Water.

Specific Gravity The only known value is 1.09 (Water = 1) (Sodium Hypochlorite).

Vapor Pressure Not available.

Vapor Density 2.0-2.5 (air=1)

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Odor Threshold	Not available.
Evaporation Rate	0.36 (Water) compared to(n-Butyl Acetate =1)
LogK_{ow}	Not available.
Solubility	Soluble in water.

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Conditions of Instability	May decompose on exposure to light.
Incompatibility with Various Substances Rem/Incompatibility	Reactive with oxidizing agents, reducing agents, combustible materials, acids. Avoid Heat Avoid contamination by any source including metals, dust, and organic materials. Avoid ammonia, alkalies, antimony salts, oils, arsenities, bromides, carbonates, chlorides, iodides, thiocyanates, ferrous salts, phosphates, tannic acid, and tartrates (Sodium Hypochlorite)
Hazardous Decomposition Products	Chlorine. , NaOH , Na2O
Hazardous Polymerization	Will not occur.

+ Section 11. Toxicological Information

RTECS Number:	Sodium Hypochlorite Water	NH3486300 ZC0110000
Toxicity	Acute oral toxicity (LD ₅₀): 96667 mg/kg (Mouse) (Calculated value for the mixture).	
Chronic Effects on Humans	Contains material which may cause damage to the following organs: blood, upper respiratory tract, skin, eye, lens or cornea.	
Acute Effects on Humans	Hazardous in case of eye contact (corrosive). Causes eye burns. Hazardous in case of skin contact (permeator, corrosive). Skin contact produces burns. Hazardous in case of inhalation (lung corrosive). Hazardous in case of ingestion.	
Synergetic Products (Toxicologically)	Not available.	
Irritancy	Draize Test: Not available.	
Sensitization	Slightly hazardous in case of inhalation (lung sensitizer).	
Carcinogenic Effects	This material is not known to cause cancer in animals or humans.	
Toxicity to Reproductive System	Not available.	
Teratogenic Effects	Not available.	
Mutagenic Effects	Not available.	

Section 12. Ecological Information

Ecotoxicity Not available.

BOD5 and COD Not available.

Toxicity of the Products of Biodegradation The products of degradation are less toxic than the product itself.

Section 13. Disposal Considerations

EPA Waste Number D002

Treatment Specified Technology - Contact your local permitted waste disposal site (TSD) for permissible treatment sites. ALWAYS CONTACT PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

+ Section 14. Transport Information

DOT Classification Proper Shipping Name: HYPOCHLORITE SOLUTIONS
Hazard Class: 8
UN number: UN1791
Packing Group: III
RQ: 100 lbs. (45.36 kg)



TDG Classification Not available.

IMO/IMDG Classification Not available.

ICAO/IATA Classification Not available.

Section 15. Regulatory Information

U.S. Federal Regulations TSCA 8(b) inventory: Sodium Hypochlorite; Water
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: Sodium Hypochlorite
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Sodium Hypochlorite: Immediate (Acute) Health Hazard
SARA 313 toxic chemical notification and release reporting: No products were found.
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: Sodium Hypochlorite
Clean air act (CAA) 112 accidental release prevention: No products were found.
Clean air act (CAA) 112 regulated flammable substances: No products were found.
Clean air act (CAA) 112 regulated toxic substances: No products were found.

WHMIS (Canada) CLASS E: Corrosive liquid.

CEPA DSL: Sodium Hypochlorite; Water

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all required information.

International Regulations

EINECS Sodium Hypochlorite 231-668-3
Water 231-791-2

DSCL (EEC) R38- Irritating to skin.
R41- Risk of serious damage to eyes.

International Lists Australia (NICNAS): Sodium Hypochlorite; Water

Germany water class: Sodium Hypochlorite

Japan (MITI): Sodium Hypochlorite; Water

Korea (TCCL): Sodium Hypochlorite; Water

Philippines (RA6969): Sodium Hypochlorite; Water

China: No products were found.

State Regulations

Pennsylvania RTK: Sodium Hypochlorite: (environmental hazard, generic environmental hazard)

Massachusetts RTK: Sodium Hypochlorite

New Jersey: Sodium Hypochlorite 6%

California prop. 65: No products were found.

Section 16. Other Information

**National Fire
Protection
Association
(U.S.A.)**



**Changed Since Last
Revision**

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Notice to Reader

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