

LAVO-12 BLEACH
SODIUM HYPOCHLORITE SOLUTION – 12%
(W.H.M.I.S.: CLASS E, D₂B)

MATERIAL SAFETY DATA SHEET

Date issued: March 2004

EMERGENCY TELEPHONE NUMBERS:

(514) 526-7783

PRODUCT IDENTIFICATION:

Product Name: **LAVO- 12**
Chemical Name: Sodium Hypochlorite 12%
Synonyms: Bleach; Javel Water
Chemical Family: Chlorite
Molecular Formula: NaOCl
Product Use: Water Purification, Bleaching Agent and Disinfectant

HAZARDOUS INGREDIENTS OF MATERIAL:

Hazardous Ingredients	%(W/V)	ACGIH TWA	CAS No.
Sodium Hypochlorite	12 - 14	0,5 ppm	7681-52-9

PHYSICAL PROPERTIES:

Appearance and Odour: Clear, greenish-yellow aqueous solution with a strong chlorine odour.
Boiling Point: Slowly decomposes at 40° C to NaCl and NaClO₃
Melting/Freezing Point: - 25° C (- 12° F) for a 12 % solution.
Vapour Pressure: 17,5 mmHg at 20° C
Specific gravity: ≈ 1,165 g/mL
Vapour Density: No data
Evaporation Rate: No data
Solubility: Miscible in all proportion in water
% Volatile by Volume: No data

pH:	11,5 - 13,0	
Coefficient of water/oil distribution:		No data
Sensitivity to Mechanical Impact:		No data
Rate of Burning:		No data
Explosive Power:		No data
Sensitivity to Static Discharge:		No data

REACTIVITY DATA:

Stability:

Under Normal Conditions: Unstable above 40^o C, when exposed to sunlight or in contact with metals.

Under Fire Conditions: Unstable

Hazardous Polymerization: Will not occur

Conditions to Avoid: Temperatures above 40^oC

Materials to Avoid: Acids, ammonia, oxidizable materials, urea, nickel, copper, manganese, iron, most metals.

Hazardous Decomposition or Combustion Products: Chlorine gas when in contact with acids; oxygen when in contact with metals

SHIPPING DESCRIPTION (Under the TDG Act)

Shipping Name:	Hypochlorite Solution
Shipping Class/Division:	Corrosive Class 8 (9.2)
Product Identification No (PIN):	UN 1791
Packing Group:	III

FIRE AND EXPLOSION DATA

Flash Point (method): Non-flammable

Autoignition Temperature: Not applicable

Flammability Limits in air (%): UEL: Not applicable
LEL: Not applicable

Fire Extinguishing Media: Use appropriate media to extinguish surrounding fire.

Fire Fighting Procedures: Full protection equipment, including a self-contained breathing apparatus, should be worn. Remove storage vessels from fire zone if possible. Use water spray to cool containers to avoid pressure build-up.

TOXICOLOGICAL AND HEALTH DATA

Recommended Exposure Limit: ACGIH TLV : 0,5 ppm (as Chlorine)

Toxicological Data:

Sodium Hypochlorite: LD 50 (oral, rat) = 8910 mg/Kg
LC 50 (inhalation, rat) > 10,500 mg/m³/H
Carcinogenicity Data: The ingredients of this product are not listed as carcinogens.
Reproductive Effects: No information is available.
Teratogenicity Data: No information is available.
Synergistic Materials: None known.

Effect of exposure when:

Inhaled: **Corrosive!** May cause irritation of the nose and upper respiratory tract, headache and coughing.
In contact with the skin: **Corrosive!** Can cause severe local irritation, burns and blisters. Prolonged or repeated contact with diluted solutions may bleach skin or cause dermatitis.
In contact with the eyes: **Very Corrosive!** Can cause irritation and severe damages resulting in blindness.
Ingested: **Corrosive!** Burning in mouth and throat. Severe pain, vomiting, diarrhea.

FIRST AID PROCEDURES WHEN: WARNING CORROSIVE!

Inhalation: Move victim to fresh air.
Give artificial respiration **ONLY** if breathing has stopped. Obtain medical attention immediately.
Skin contact: Remove contaminated clothing. Flush affected area with water for at least **20 minutes**. Obtain medical attention.
Eye contact: Flush immediately eyes with running water for at least **30 minutes** holding eyelids open.
Obtain medical attention immediately.
Ingestion: If victim is alert and not convulsing, rinse out mouth and give 1/2 to 1 glass of water to dilute material. **DO NOT** induce vomiting.
Obtain medical attention immediately.

PREVENTIVE MEASURES:

Engineering Controls: Local exhaust ventilation.
Respiratory Protection: NIOSH/MSHA approved air-purifying respirator equipped with Chlorine cartridges when necessary.
Skin Protection: Use rubber gloves and apron. Rubber boots if necessary also.
Eye Protection: Use chemical safety goggles when there is potential for eye contact.
Other Personal Protective Equipment: Safety showers and eyewash fountains should be installed in storage and handling areas.
Handling Procedures and Equipment: Protect containers against physical damage.
Storage Temperature (°C): Below 29°C and above freezing point.
Storage Requirements: Store in a cool (below 29°C) dry, well-ventilated area away from incompatibles and direct sunlight. Long-term storage is

impossible without decomposition. Use polyethylene containers.

Other Precautions: No special requirements.

ENVIRONMENTAL PROTECTION DATA:

Steps to be taken in the event of a spill or leak:

Ventilate area. Stop and contain leak or spill. Absorb using an inert material (sand, ashes, etc.), collect and dispose. For recovery, pump into polyethylene containers.

Waste Disposal Methods: Consult federal, provincial, state and local regulations on chemical waste disposal.

ADDITIONAL INFORMATION AND SOURCES USED:

SAX, N.I., Dangerous Properties of Industrial Materials.
Supplier's MSDS

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Prepared by: **GROUPE LAVO (LABORATORY)**