



SODIUM HYPOCHLORITE (BLEACH) 12% TRADE

SECTION I: PRODUCT INFORMATION

Product Identifier → Sodium Hypochlorite (Bleach)
12% Trade

Product Use → Bleaching, sanitizing, deodorizing,
reagent chemical

Distributor's Name & Address →

Prairie Petro-Chem

738 – 6th Street

Estevan, SK

S4A 1A4

EMERGENCY #

Ph: 306-634-5808

Fx: 306-634-6694

Product Identification Number (PIN) → Class 8,
UN-1791, P.G. III

WHMIS Classification → E-Corrosive

SECTION II: HAZARDOUS INGREDIENTS

Component → SODIUM HYPOCHLORITE

| CAS No. | % | ACGIH | OSHA | Other | Hazard |
|-----------|------|-------|------|-------|-----------|
| | | TLV | PEL | Limit | |
| 7681-52-9 | 7-13 | 1ppm | None | None | Corrosive |

LD₅₀ (Oral, rat) → N/D

LD₅₀ (Dermal, rabbit) → N/D

LC₅₀ (Inhalation, rat) → 293 ppm for 1 hour (1)

SECTION III: PHYSICAL DATA

Physical State (Gas, Liquid, Solid) → Liquid

Odour and Appearance → Clear greenish-yellow
liquid; Chlorine Odour

Odour Threshold → N/D

Vapour Pressure mmHg @20°C → 17.5

Vapour Density → N/D

Evaporation Rate → N/D (Butyl Acetate=1)

Boiling Point @760mmHg → Slowly decomposes @
40° C to NaCl & NaClO₃

Freezing Point °C → -25 for 11% solution

pH → 11.5 – 13.5

Specific Gravity @ 15°C → 1.18

Solubility in Water @20°C → Miscible in water in all
Proportions

SECTION IV: FIRE OR EXPLOSION HAZARD

Flash Point → N/A - Non-flammable

Upper Explosive Limit (% by Volume) → N/A

Lower Explosive Limit (% by Volume) → N/A

Auto-Ignition Temperature → N/A

Extinguishing Media → Use appropriate media to
extinguish surrounding fire.

Fire Fighting Procedures → Use self-contained
breathing apparatus with full facepiece operated in
pressure demand or other positive pressure mode.
Addition of water to burning fuel will reduce the
intensity of the flame.

Hazardous Combustion Products → N/A

Unusual Fire and Explosion Hazards → Material is
non-flammable but is decomposed by heat and light
causing a pressure build-up in containers which could
result in an explosion. When heated or in contact with
acids, it may release Chlorine. Vigorous reaction with
oxidizable or organic materials may result in fire.

SECTION V: REACTIVITY DATA

Stability → Unstable above 40°C, in sunlight and in
contact with metals.

Conditions to Avoid → Temperatures above 40°C.

Materials to Avoid → Strong Acids, strong caustics,
ammonia, oxidizers, urea, nickel, copper, tin,
manganese and iron.

Hazardous Decomposition Products →

Chlorine gas (contact with acids);

Oxygen (contact with metals).

SECTION VI: TOXICOLOGICAL PROPERTIES

| | |
|--------------------------------------|------------|
| Route of Entry → Skin Contact | <u>YES</u> |
| Skin Absorption | <u>NO</u> |
| Eye Contact | <u>YES</u> |
| Inhalation | <u>YES</u> |
| Ingestion | <u>YES</u> |

Effects of Exposure When →

Inhaled – Chlorine gas may be evolved which
causes irritation of the nose and upper respiratory tract,
headache and coughing. Other symptoms of
overexposure include nausea, vomiting, dizziness,
shortness or breath, cyanosis and chest pain. Exposure to
high concentrations of chlorine can cause decrease in
lung function, pulmonary edema which may be delayed
in onset, unconsciousness and death.

In Contact With Skin - Can cause severe local
irritation, burns and blisters. Prolonged or repeated
contact with dilute solutions may bleach skin or cause
dermatitis.

In Contact with Eyes - Contact with eyes can
cause severe damage resulting in blindness.

Ingested - Burning in mouth and throat. Severe
pain, vomiting, diarrhoea, lowered blood pressure and
shock. Possible death.

Other Health Effects - Prolonged and repeated
exposure to chlorine gas may cause erosion of the teeth
and skin irritation.

Exposure Limits → ACGIH TWA STEL C
1ppm (as Chlorine) N/D N/D

Carcinogenicity → The ingredient(s) of this product is
(are) not classified as carcinogenic by ICGIH (American
Conference of Government Industrial Hygienists), or
IARC (International Agency for Research on Cancer),
not regulated as carcinogens by OSHA (Occupational
Safety and Health Administration) and not listed as
carcinogens by NTP (National Toxicology Program).





SECTION VI: TOXICOLOGICAL PROPERTIES

(Continued from Page 1)

Reproductive Toxicity → No information is available and no adverse reproductive effects are anticipated.

Mutagenicity → Sodium Hypochlorite causes Mutagenic effects in 'in vivo' studies.

Teratogenicity → No information is available and no adverse teratogenic effects are anticipated.

Synergistic Materials → None known.

SECTION VII: PREVENTIVE MEASURES

Respiratory Protection → For concentrations up to 10ppm use of a NIOSH/MSHA approved air-purifying respirator equipped with Chlorine cartridges is recommended. Where the protection factor of the respirator may be exceeded, use of a self-contained breathing apparatus may be necessary.

Protective Gloves → Impervious Gloves

Eye Protection → Chemical Safety Goggles or Face Shield

Other Protective Equipment → Impervious apron and boots, eye bath and shower located near chemical area.

Ventilation → LOCAL: Preferable

MECHANICAL (General): Acceptable

Spill & Leak Procedure → 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. Very small spills may be flushed with large amounts of water.

Waste Disposal → Consult federal, provincial, state and local regulations on chemical waste disposal. May be possible to neutralize, flush and disperse.

Handling Procedures & Equipment → Avoid splash filling. Protect containers against physical damage.

Storage Requirements → Store in a cool (below 29°C), dry, well-ventilated area, away from incompatibles and direct sunlight. Vented containers must be used and must be kept closed when not being used. Long-term storage is impossible without decomposition.

Special Shipping Information → TDG –
(Transportation of Dangerous Goods)

Shipping Name → Hypochlorite Solution

| <u>Prim.Class</u> | <u>Sub.Class</u> | <u>(PIN)U.N.</u> | <u>E/I</u> | <u>Packing Grp</u> |
|-------------------|------------------|------------------|------------|--------------------|
| 8 | - | 1791 | - | III |

SECTION VIII: FIRST AID MEASURES

First Aid Procedures When →

Inhaled - Move victim to fresh air. Stay with victim and have a second rescuer obtain oxygen equipment and call an ambulance. Oxygen should be administered only by trained personnel. If not breathing, give artificial respiration. Give cardiopulmonary

resuscitation (CPR) if there is no breathing and no pulse. Obtain medical attention IMMEDIATELY.

In Contact With Skin – Remove contaminated clothing. Flush skin with running water for at least 20 minutes. Obtain medical advice.

In Contact With Eyes – Flush thoroughly with water for 20 minutes, holding eyelids open. Obtain medical attention.

Ingested – If victim is alert and not convulsing, rinse out mouth and give ½ to 1 glass of water to dilute material. DO NOT induce vomiting. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in the vomit, rinse mouth and administer more water. IMMEDIATELY transfer victim to an emergency centre.

EMERGENCY MEDICAL CARE: This product contains materials that may cause severe pneumonitis if aspirated. If ingestion has occurred less than 2 hours earlier, carry out careful gastric lavage; use endotracheal cuff if available to prevent aspiration. Observe patient for respiratory difficulty from aspiration pneumonitis. Give artificial resuscitation and appropriate chemotherapy if respiration is depressed. Pulmonary edema due to Chlorine gas inhalation is possible and may be delayed. Steroid therapy, if given early, may be effective in preventing or alleviating edema. Medical conditions that may be aggravated by exposure include asthma, bronchitis, emphysema and other lung diseases and chronic nose, sinus or throat conditions. In the event of skin or eye contact, rapid and thorough flushing is essential.

SECTION IX: PREPARATION INFORMATION

Prepared By → Product Safety Committee
(WHMIS Division)

Preparation Date → May 3, 2010

The above information is supplied as a customer service and is provided in good faith. Although it has been based on data drawn from sources deemed to be reliable, Prairie Petro-Chem cannot guarantee its accuracy and assumes no responsibility for conditions resulting from its use.

END OF MSDS

KEY TO ABBREVIATIONS

N/D – No Data Available
N/A – Not Applicable

LD₅₀ – Lethal Dose
LC₅₀ – Lethal Concentration

