

MATERIAL SAFETY DATA SHEET

1. **CHEMICAL PRODUCT IDENTIFICATION**

Chemical Name : Sodium Hypochlorite Solution
UN.No.1791
Synonym : Bleach Hypochlorous acid, Sodium Salt, Soda bleach &
Sodium Oxychloride.
Chemical Formula : Naocl
Molecular weight : 74.44
Product codes : 9416, P005

2. **PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : Colourless to yellowish liquid
Odor : Chlorine like odor
Solubility : 100% in water
Density : 1.07 – 1.14
Boiler point : 40C(104F) Decomposer slightly
Meeting point : -6C (21F)

3. **STABILITY AND REACTIVITY**

Stability : Slowly decomposes on contact with air. Rate increases with the concentration and temperature. Exposure to sunlight acceleration decomposition. Sodium Hypochlorite becomes less toxic with age.

Hazardous Decomposition Product:

Emits toxic fumes of Chlorine when heated to decomposition. Sodium oxide at high temperatures.

Hazardous Polymerization : Will not occur.

Continuous to avoid : Light, heat and incompatibles.

4. **HAZARDS IDENTIFICATION**

Potential Health effects:

Inhalation : May cause irritation to the respiratory that (Nose and throat; symptoms may include coughing and sore throat)
Ingestion : May cause nausea and vomiting.
Skin contact : May irritate skin.
Eye contact : Contact may cause severe irritation and damage especially

at higher concentration.
Chronic Exposure : A constant irritant to the eyes and throat. Low potential for sensitization after exaggerated exposure to damage skin.

Aggravation of pre-existing conditions:

Persons with impaired respiratory function, or heart disorders (or disease) may be more susceptible to the effects of substance.

5. **FIRST AID MEASURES (Safety Precaution):**

Inhalation : 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. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin contact : Immediately flush skin with plenty of water for atleast 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before re-use. Thoroughly clean shoes before re-use.

Eye contact : Immediately flush eyes with plenty of water for atleast 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

6. **FIRE FIGHTING MEASURES:**

Fire : Not considered to be a fire hazard, substance releases oxygen when heated, which may increase the severity of an existing fire containers may rupture from pressure build-up.

Explosion : This solution is not considered to be an explosion hazard. Anhydrous sodium hypochlorite is very explosive.

Fire Extinguishing media: Use any means suitable for extinguishing surrounding fire. Use water spray to cool fire-exposed containers to dilute liquid and control vapour.

Special information : In the event of a fire, wear full protective clothing and NIOSH – approved self – contained breathing apparatus with full face shield operated in the pressure demand or other positive pressure mode.

Chemistry for every day Living