



Eilat Swimming Pools L.T.D מ"מ אילת בריכות שחיה בע"מ

שירות-אספקה-אחזקה-ייעוץ לבריכות שחיה ומערכות מים

כימיקלים- רובוטים - בקרה ממוחשבת - מכשירי מדידה ובקרה - חלקי חילוף - אביזרי PVC - משאבות

Liquid Caustic Soda, 50% Solution

Material Safety Data Sheet

General

Chemical Name: **Sodium Hydroxide in Aqueous Solution**

Synonyms: **Sodium Hydroxide (50% solution); Sodium Hydrate; Lye, Alkali**

Molecular formula: **NaOH/H₂O**

Molecular formula: **NaOH/H₂O**

Formula Weight: **40**

Composition/Information on Ingredients:

<u>Material</u>	<u>CAS #</u>	<u>% by Weight</u>
Sodium Hydroxide	1310-73-2	49-51%
Sodium Chloride	7647-14-5	<1.0%
Sodium Chlorate	7775-09-9	<0.2%
Water	7732-18-5	BAL

Exposure Guidelines: ACGIH (TWA) 2 mg/m³ (ceiling)

ACGIH (STEL): None established

OSHA (TWA): 2 mg/m³ (ceiling)

OSHA (STEL): None established

OSHA (PEL): 2 mg/m³ (ceiling)

טל: 08-6333027 פקס: 08-6333037

ת.ד. 9075, 88000, אילת

עמוד 1 מתוך 7

<http://www.eilatpools.com>

<mailto:eilatpools@gmail.com>





אילת בריכות שחיה בע"מ Eilat Swimming Pools L.T.D

שירות-אספקה-אחזקה-ייעוץ לבריכות שחיה ומערכות מים

כימיקלים- רובוטים - בקרה ממוחשבת - מכשירי מדידה ובקרה- חלקי חילוף - אביזרי PVC - משאבות

Hazard Identification

▪ Hazard Rating System:

- NPFA: HEALTH: 3
- FLAMMABILITY: 0
- REACTIVITY: 1

KEY: 0 - Minimal, 1 - Slight, 2 - Moderate, 3 - Serious, 4 - Severe

▪ Potential Health Effects:

- Target Organs: Eyes, respiratory system, skin, and lungs.
- Routes of Exposure: Eye contact, inhalation, skin contact
- Eyes: May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Mists may cause eye irritation.
- Skin: Classified as corrosive according to DOT. Short single exposure may cause severe skin burns. A single prolonged exposure is not likely to result in absorption of harmful amounts.
- Ingestion: May cause severe burns of the mouth and throat. Ingestion may cause gastrointestinal irritation or ulceration.
- Inhalation: Mists may cause severe irritation of the upper respiratory tract (nose and throat).
- Systemic (Other target organ) effects: No relevant information found.
- Cancer Information: No relevant information found.
- Teratology (Birth defects): No relevant information found.
- Reproductive effects: No relevant information found.

First Aid Measures

▪ Eye Contact:

- Wash eyes immediately and continuously until assistance arrives for transport to medical facility; wash enroute, if possible.
- If medical assistance is not immediately available, wash for 30 minutes and seek medical attention immediately.

▪ Skin Contact:

- Immediate continued and through washing in flowing water for 30 minutes is imperative while removing contaminated clothing.
- Promot medical consultation is essential.

▪ Inhalation:

- Remove to fresh air if effects occur.
- Consult a physician.

▪ Ingestion

- DO NOT induce vomiting.
- Give large amounts of water or milk if available and transport to medical facility.

טל: 08-6333027 פקס: 08-6333037

ת.ד. 9075, 88000 אילת

עמוד 2 מתוך 7

<http://www.eilatpools.com>

<mailto:eilatpools@gmail.com>





Eilat Swimming Pools L.T.D מ"מ אילות בריכות שחיה בע"מ

שירות-אספקה-אחזקה-ייעוץ לבריכות שחיה ומערכות מים

כימיקלים- רובוטים - בקרה ממוחשבת - מכשירי מדידה ובקרה- חלקי חילוף - אביזרי PVC - משאבות

- Notes to Phisician:
 - May cause tissue destruction/stricture.
 - If lavage is performed, suggest endotracheal and/or esophageal control.
 - Material is strong alkali.
 - If burn is present, treat as any thermal burn, ater decontamination.
 - For burns of skin only.
 - Eye irrigation may be necessary for an extended period of time to remove as much caustic as possible.
 - Duration of irrigation and treatment is at the discretion of medical personnel.
 - No specific antidote.
 - Supportive care.
 - Treatment based on judgment of the physician in response to reaction the patient.

Fire and Explosion Data

- Flammability of the Product:
 - Product reacts with water.
 - Reaction may produce heat and/or gases.
 - This reaction may be violent.
 - Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.
 - This material does not burn.
- Auto-Ignition Temperature: Not applicable.
- Flash Points (PMCC): NONE
- Hazardous Combustion products: Not applicable.
- Extinguishing Media:
 - This material does not burn.
 - If exposed to fire from another source, use suitable fire extinguishing agent for that fire.
- Fire Fighting Instructions:
 - Keep people away.
 - Isolate fire area and deny unnecessary entry.
 - This material does not burn.
 - Fight fire for other material that is burning.

ת.ד 9075 ,88000 אילת טל:08-6333027 פקס: 08-6333037
עמוד 3 מתוך 7 <http://www.eilatpools.com> <mailto:eilatpools@gmail.com>





אילת בריכות שחיה בע"מ Eilat Swimming Pools L.T.D

שירות-אספקה-אחזקה-ייעוץ לבריכות שחיה ומערכות מים

כימיקלים- רובוטים - בקרה ממוחשבת - מכשירי מדידה ובקרה - חלקי חילוף - אביזרי PVC - משאבות
Protective Equipment for Fire Fighters:

- Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots and gloves).
- Avoid contact with this material during fire fighting operations.
- If contact is likely, change to full chemical resistant clothing with SCBA.
- This will not provide sufficient fire protection, consider fighting fire from a remote location.
- For protective equipment in post-fire or non-fire clean up situations, refer to the relevant sections.

Accident Release Measures

- Protect People:
 - Evacuate area.
 - Clear non-emergency personnel from area.
 - Ventilate area of spill or leak.
- Protect Environment: Contain material to prevent contamination of soil, surface water or ground water.
- Clean-up:
 - Dike spills immediately.
 - Carefully flush small spills of caustic soda solution with water.
 - Attempt to neutralize final traces of caustic soda with dilute acid, preferably acetic acid.

Handling and Storage

- Avoid breathing mist.
- Avoid breathing vapors.
- Hazardous carbon monoxide gas can form upon contact with food and beverage products in enclosed spaces and can cause death. Follow appropriate tank entry procedures (ANSI Z117).
- Do not get in eyes, on skin, or clothing.
- Do not take internally.
- Keep away from acids to avoid possible violent reaction.
- Wash contaminated clothing before reuse.
- Wash thoroughly after handling. Exposure can cause burns which are not immediately painful or visible.
- Wear personal protective equipment as described in Exposure Data.
- If product is added too rapidly or without stirring, and becomes concentrated at bottom of mixing vessel, excessive heat may be generated, resulting in DANGEROUS boiling and spattering and a possible IMMEDIATE AND VIOLENT ERUPTION of a highly caustic solution.
- Keep container tightly closed and properly labeled. Dike storage containers to contain 110% of tank volume.
- Under normal conditions this product can be stored satisfactorily in mild steel without an interior lining. &Aluminum is not recommended for storage and handling.
- Store above 60°F (16°C).

ת.ד 9075, 88000 אילת טל: 08-6333027 פקס: 08-6333037
עמוד 4 מתוך 7 <http://www.eilatpools.com> <mailto:eilatpools@gmail.com>





Eilat Swimming Pools L.T.D מ"מ אילת בריכות שחיה בע"מ

שירות-אספקה-אחזקה-ייעוץ לבריכות שחיה ומערכות מים

כימיקלים- רובוטים - בקרה ממוחשבת - מכשירי מדידה ובקרה- חלקי חילוף - אביזרי PVC - משאבות

Exposure Controls/Personal Protection

- Engineering Controls: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.
- Respiratory Protection:
 - Atmospheric levels should be maintained below the exposure guideline.
 - If respiratory irritation is experienced, use an approved air purifying respirator.
- Skin Protection:
 - Use protective clothing impervious to this material.
 - Selection of specific items such as faceshield, gloves, boots, apron, or full-bodysuit will depend on work area.
 - Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse.
 - Contaminated leather items, such as shoes, belts and watchband, should be removed and destroyed.
- Eye/Face Protection:
 - Use chemical goggles.
 - Wear a face-shield which allows use of chemical goggles, or wear a full-face respirator to protect face and eyes when there is any likelihood of splashes.
 - Eye wash fountain should be located in immediate work area.
- Exposure Guidelines:
 - Sodium hydroxide: OSHA PEL and ACGIH TLV are 2 mg/m³ Ceiling.
 - PELs are in accordance with those recommended by OSHA, as in the 1989 revision of PELs.

Physical and Chemical Properties

- Appearance: Clear, colorless viscous liquid
- Odor: No discernible odor
- Physical State: Liquid
- Boiling Point: Approx. 293°F, 145°C
- Freezing Point: Approx. 58°F, 14°C
- Vapor Density: Not applicable
- Solubility (H₂O): Complete (100%)
- Specific Gravity: @20°C (Dens.) 1.52 g/ml
- pH: 14

ת.ד 9075 ,88000 אילת טל: 08-6333027 פקס: 08-6333037
עמוד 5 מתוך 7 <http://www.eilatpools.com> <mailto:eilatpools@gmail.com>





אילת בריכות שחיה בע"מ Eilat Swimming Pools L.T.D

שירות-אספקה-אחזקה-ייעוץ לבריכות שחיה ומערכות מים

כימיקלים- רובוטס - בקרה ממוחשבת - מכשירי מדידה ובקרה - חלקי חילוף - אביזרי PVC - משאבות

Stability and Reactivity

- Chemical Stability: Stable under recommended storage conditions.
- Conditions to Avoid: Avoid temperature below 85°F
- Conditions to Incompatibility:
 - Heat is generated when mixed with water.
 - Spattering and boiling can occur.
 - Flammable hydrogen may be generated from contact with metals such as: aluminum, brass, tin, zinc.
 - Avoid contact with acids, halogenated organics, organic nitro compounds, glycols.
 - Caustic soda solution reacts readily with various reducing sugars (i.e. fructose, galactose, maltose, dry when solids) to produce carbon monoxide.
 - Precautions should be taken including monitoring the tank atmosphere for carbon monoxide to ensure safety of carbon monoxide to ensure safety of personnel.
- Hazardous Decomposition Products: It does not decompose.
- Hazardous Polymerization: will not occur.

Toxicological Information

- Skin: The dermal LD50 has not been determined.
- Ingestions: Single dose oral LD50 has not been determined.
- Mutagenicity: No relevant information found.

Ecotoxicity:

- Based on information for sodium hydroxide.
- material is slightly toxic to aquatic organisms on an acute basis (LC50 between 10 - 100mg/L in most sensitive species).
- May cause pH shifts outside the range of 5 - 10; this change may be toxic to aquatic organisms.

Disposal Considerations

- Waste Disposal:
 - DO NOT DUMP INTO ANY SWERS, ON THE GROUND OR INTO ANY BODY OF WATER.
 - All disposal methods must be in compliance with all Federal, State/Provincial and local law and regulations.
 - Regulations may vary in different locations.
 - Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.
- For Unused & Uncontaminated Product: The preferred options include sending to a licensed, permitted: recycler.

ת.ד 9075 ,88000 אילת טל: 08-6333027 פקס: 08-6333037
עמוד 6 מתוך 7 <http://www.eilatpools.com> <mailto:eilatpools@gmail.com>





Eilat Swimming Pools L.T.D מ"מ אילת בריכות שחיה בע"מ

שירות-אספקה-אחזקה-ייעוץ לבריכות שחיה ומערכות מים

כימיקלים- רובוטים - בקרה ממוחשבת - מכשירי מדידה ובקרה- חלקי חילוף - אביזרי PVC - משאבות

Transport Information

U.S. Department of Transportation

- o proper shipping Name: Sodium Hydroxide, Solution
- o ID No.: UN 1824
- o Hazard Class: 8
- o Packing Group: II
- o Label: Corrosive

Disclaimer:

Eilat Swimming Pools LTD provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

EILAT SWIMMING POOLS LTD . MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS.

ACCORDINGLY, EILAT SWIMMING POOLS LTD. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.

הצהרה:

אילת בריכות שחיה בע"מ מספקת את המידע הכלול במסמך זה בתום לב, אך אינה מתחייב לשלמותו כאו הדיוק שלה. מסמך זה מיועד אך ורק כמדריך לטיפול בזהירות המתאים של החומר על ידי אדם שהוכשר כראוי שימוש במוצר זה.

אנשים שקיבלו את המידע חייבים להפעיל שיקול דעת העצמאית משלהם בקביעת התאמתו למטרה מסוימת.

אילת בריכות שחיה בע"מ. אינה יוצרת מצג או אחריות, מפורש או משתמע, לרבות אך לא רק אחריות לסחירות, התאמה למטרה מסוימת ביחס למידע המפורט במסמך זה או המוצר שעליו המידע מתייחס.

לפיכך אילת בריכות שחיה בע"מ, לא יהיה אחראי לנזקים הנובעים משימוש או הסתמכות על מידע זה.

טל: 08-6333027 פקס: 08-6333037

ת.ד. 9075, 88000 אילת

עמוד 7 מתוך 7

<http://www.eilatpools.com>

<mailto:eilatpools@gmail.com>

