



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

שירות-ASFKA-אחזקה-יעוז לבריכות שחייה ומערכות מים

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

Sodium Hypochlorite 5-15%

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : **Sodium Hypochlorite**
PRODUCT ID : 0286
SYNONYMS : **Sodium hypochlorite / Aqueous Solution (5-15%)**
ISSUE DATE : 12/20/2000
EDITION NO : 7

PREPARER : **Product Safety , Chemicals**

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Material/CAS Number</u>	<u>Percent</u>
Sodium Hydroxide 1310-73-2	1
Sodium Hypochlorite 7682-52-9	5 – 15
Water 7732-18-5 (34% solution in water)	84-94

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

DANGER ! Corrosive – Causes severe burns to eyes and skin .

Precaution : Do not get in eyes , on skin , or on clothing . May cause severe burns and permanent damage . Do not breathe vapors or mists from solution . Use only with adequate ventilation . Ventilation must be sufficient to minimize employee exposure to this product . Do not swallow . Wash thoroughly after handling . Do not eat , drink or smoke in work area . Prevent exposure of this product to sunlight and extreme heat which causes decomposition of sodium hypochlorite to irritating chlorine gas and oxygen .

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עומוד 1 מתוך 8 <mailto:eilatpools@gmail.com>

ת.ד 88000 , 9075 אילת
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4. FIRST AID MEASURES

INHALATION : Remove from area to fresh air . Contact a poison control center , emergency room or physician right away as further treatment will be necessary .

EYE/SKIN CONTACT : **EYE :** Remove contact lens and pour a gentle stream of warm water through the affected eye for at least 15 minutes . Contact a poison control center , emergency room or physician right away as further treatment will be necessary . **SKIN :** Run a gentle stream of water over the affected area for 15 minutes . A mild soap may be used if available . Contact a poison control center , emergency room or physician right away as further treatment will be necessary .

INGESTION : Gently wipe or rinse the inside of the mouth with water . Sips of water may be given if person is fully conscious . never give anything by mouth to an unconscious or convulsing person . Do not induce vomiting . Contact a poison control center , emergency room or physician right away as further treatment will be necessary .

5. FIRE FIGHTING MEASURES

FLASH POINT : *Non-flammable (in solution)*

EXTINGUISHING MEDIA : *Not applicable .*

SPECIAL FIREFIGHTING PROCEDURES : *Fire-fighters must wear NIOSH approved , pressure demand , self-contained breathing apparatus with full face piece for possible exposure to hazardous gases . Can decompose to form irritating , poisonous chloride gas and oxygen .*

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6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL RELEASED OR SPILLED :

Immediately evacuate the area . Remove sources of ignition . Provide maximum ventilation Unprotected personnel should move upwind of spill . Only personnel with proper respiratory and eye/skin protection should be permitted in the area . Dike area to contain spill . Recover spilled material on adsorbents , such as sand or vermiculite , and place in covered containers for reclamation or disposal . Large spills : Recover spilled material on adsorbents , such as vermiculite , and sweep into closed containers for disposal . Do not use combustible adsorbents such as sawdust . After all visible traces have been removed , thoroughly wet vacuum the area . Do not flush to sewer . If area of spill is porous , remove as much contaminated earth and gravel ,etc . as necessary and place in closed containers for disposal . Small spill (<10 gallons) : Can be diluted with large quantities of water and then flushed to sanitary sewer .

7. HANDLING AND STORAGE

PRECAUTION TO BE TAKEN DURING HANDLING AND STORAGE :

Wear respiratory protection whenever exposure to vapor is likely . Wear appropriate personal protective equipment when handling this product . Store in a cool , dry , well-ventilated place . Store only in close , properly labeled containers . Keep container closed when not in use . Store away from acids and organics . Avoid excessive storage temperatures and direct sunlight . Will decompose to poisonous , chlorine gas and flammable oxygen .

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits :

8-hour Time Weighted Average (TWA) ;15-minute Short-Term Exposure Limit (STEL)

OSHA : No occupation exposure limits have been established by OSHA for this product .

ACGIH : No occupational exposure limits have been established by ACGIH for this product .

PPG (IPEL) : No occupation exposure limits have been established by PPG for this product

RESPIRATORY PROTECTION : Use NIOSH approved a half or full facepiece acid gas chemical cartridge respirator when exposures to sodium hypochlorite are likely . An appropriate particulate prefilter is also required when mists are present . The respiratory use limitation made by NIOSH or the manufacturer must be observed . Respiratory protection programs must be in accordance with 29 CFR 1910.134.

VENTILATION : Use local exhaust or general room/dilution ventilation as appropriate to control employee exposures in the work place .

EYE AND FACE PROTECTION : Close fitting chemical safety goggles with faceshield .

PROTECTIVE GLOVES : Neoprene or nitrile gloves .

OTHER PROTECTIVE EQUIPMENT : Boots , aprons , or chemical suits should be used when necessary to prevent skin contact / Personal protective clothing and use of equipment must be in accordance with 29 CFR 1910.132 (general requirements) , 133 (eye and face protection) , and . 138 (hand protection) .

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9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: 96-120°C (205-248°F) Decomposes

VAPOR DENSITY (AIR =1): NA

SPECIFIC GRAVITY (Water=1): 1.21 @ 20°C

PH: Approx . 13

FREEZING/MELTING POINT : 14°C (6°F)

SOLUBILITY (wt.%in water) : infinite

BULK DENSITY : 8.8 lbs/gal (U.S.)

VOLUME % VOLATILE : approx. 94%

VAPOR PRESSURE : 17.5 mm Hg @ 20°C

EVAPORATION RATE : Approx. 1 (water=1)

HEAT OF SOLUTION : N/A

PHYSICAL STATE : Liquid

ODOR : Chlorine . Bleach-like odor .

COLOR : Clear , Pale Yellow or Greenish .

10. STABILITY AND REACTIVITY

STABILITY : **Stable**

HAZARDOUS POLYMERIZATION : **Will not occur .**

INCOPATIBILITY (CONDITIONS/MATERIALS TO AVOID):

Avoid mixing with acids (liberates chlorine) , ammonia , urea , oxidizing materials , and metals such as nickel , copper , tin , manganese and iron (liberates oxygen) . Excessive heat .

HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS :

Chlorine gas and oxygen .

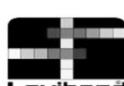
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11. TOXICOLOGICAL INFORMATION

ACUTE INHALATION LC50 : Unknown

SKIN IRRITATION :

Corrosive

EYE IRRITATION :

Corrosive

ACUTE ORAL LD50:

(rat) 8.91 g/kg (12% solution) Slight to very low

toxicity .

CHROMIC EFFECTS/CARCINOGENICITY : This product is NOT listed as a carcinogen or suspected carcinogen by NPT , IARC , or OSHA .

MEDICAL CONDITIONS AGGRAVATED : None known .

EFFECT OF OVEREXPOSURE :

ACUTE :

Inhalation : Inhalation of mist or fumes can cause bronchial irritation , cough , difficult breathing , inflammation of the mouth , nausea , and in severe exposures , pulmonary edema . Material has chlorine odor .

Eye/skin : Liquid contact can produce irritation of the skin with blistering and eczema .

Direct contact with eyes may cause redness , pain , burns and permanent damage .

Ingestion : Ingestion of a few ounces can cause corrosion of mucous membranes , swelling of the throat , perforation of the esophagus , and stomach , vomiting , colitis , hypotension and circulatory collapse . May lead to convulsion , coma or death . At 15% concentrations , as little as 1 ounce may be lethal due to corrosive properties .

CHRONIC :

Carcinogenesis : The carcinogenic potential of sodium hypochlorite was studied in F344 Rats . After 104 weeks of drinking water containing up to 2000 ppm sodium hypochlorite , there was no evidence that this chemical produced any carcinogenic response . In addition , this exposure did not result in any adverse effect in blood , chemistry , or other target organs .

Safe handling of this material on a long term basis should emphasize repeated acute exposure .

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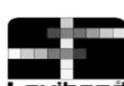
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12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION :

No data at this time .

PPG :

0286

Sodium Hypochlorite

12/20/2000

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD :

Dispose of in an approved hazardous waste management facility . Care must be taken when using or disposing of chemical materials and /or their containers in accordance with the clean Air Act , the clean Water Act ,the Resource Conservation and Recovery Act , as well as any other relevant Federal ,State , or local laws / regulations regarding disposal .

14. TRANSPORT INFORMATION

Proper Shipping Name : Sodium hypochlorite solution

NOS Technical Name : Sodium Tetrasulfide

Hazard Class : 8 (Corrosive)

UN Number : UN1791

Packing Group : III

USA-RQ,Hazardous Substance and Quantity : 100 lbs./45.4 Kg

CANADA TDG DESCRIPTION : Canada adds 9.2 subrisk for concentration greater then 20% if shipped in a container larger then 3000 liters .

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15. REGULATORY INFORMATION

USA TSCA : This product is listed on the TSCA Inventory .

EUROPE EINECS : This product is listed on EINECS . (231-668-3)

CANADA DSL : This product is listed on the Canadian DSL .

AUSTRALIA AICS : This product is listed on AICS .

KOREA ECL : This product is listed on ECL .

JAPAN MITI (ENCS) : All components in this product are listed on the Japanese Existing and new Chemical Substances (ENCS) chemical inventory .

SARA TITLE 111:

SARA (311.312) Hazard Class :

Acute Health Hazard .

SARA (313) Chemicals :

Not listed .

SARA Extremely Hazardous Substance :

Not listed .

CERCLA Hazardous Substance :

Listed in Table 302.4 of 40 CFR Part 302 as a hazardous substance with a reportable quantity of 100 pounds .

RCRA: Not listed

CANADA REGULATIONS (WHMIS) : Class E – Corrosive Material .

16 . OTHER INFORMATION

The following has been revised since the last issue of this MSDS :

Data . Edition has been reformatted into 16 sections .

Previous revision data : 06/23/1997

Previous edition number : 006

NA=Not Available

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