



Centre Anti-Poison pour le Québec: (800) 463-5060

Tél. (Qc): (418) 660-8666 / 800-890-8666


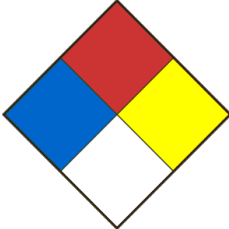
Fax. (Qc): (418) 660-8998

## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

|  |                                    |   |   |
|--|------------------------------------|---|---|
| Product Identifier<br>SODIUM HYDROXIDE (0.01M/N)   |                                    | Product Use<br>Laboratory use               |   |
| Chemical formula<br>NaOH   |                                    | Product code<br>SS-0801                     | Molar weight<br>40                        |
| Chemical name / Commercial name / Synonymous<br>SODIUM HYDROXIDE, HYDRATE DE SODIUM, SOUDE CAUSTIQUE, LYE, CAUSTIQUE, GILLETTE |                                    |   |   |
| Supplier's name<br>Laboratoire MAT   |                                    | Address-Street<br>610, Adanac Street        |   |
| City<br>Québec   |                                    | Province<br>Québec                          |   |
| Postal code<br>G1C 7B7   | Internet<br>www.labmat.com         | Phone number<br>418-660-8666 / 800-890-8666 |   |
| Emergency phone  | CANUTEC: 613-996-6666              |   | CENTRE ANTI-POISON DU QUÉBEC 800-463-5060 |
| Date SDS<br>3/5/2020   | SDS Prepared by<br>Laboratoire MAT | E-Mail<br>labmat@labmat.com                 |   |

## SECTION 02 - HAZARDS IDENTIFICATION

|   |   |
|---|---|
| <b>Classification WHIMS / GHS</b>   | Serious eye damage/eye irritation - Serious eye damage category 1<br>Skin corrosion/irritation - Skin corrosion category 1  |
| <b>Signal Word</b>  | DANGER  |
| <b>Hazards statements (H)</b>   | H314 Causes severe skin burns and eye damage.<br>H318 Causes serious eye damage.  |
| <b>Precautionary statements (P)</b>   | P260 Do not breathe dust / fume / gas / mist / vapours / spray.<br>P264 Wash the areas of the body that have been in contact with the product after handling.<br>P280 Wear protective gloves/protective clothing/eye protection/face protection.<br>P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.<br>P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.<br>P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.<br>P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P310 Immediately call a POISON CENTER or doctor/physician.<br>P321 Specific treatment (see section 4 of the SDS and on this label).<br>P363 Wash contaminated clothing before reuse.<br>P405 Store locked up.<br>P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company. |
| <b>PICTOGRAMS</b>   |   |
| <b>Other dangers</b>  | NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)   |
|  | <b>Health</b> 1<br><b>Fire</b> 0<br><b>Reactivity</b> 0<br><b>Special danger</b>  |

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

| Ingrédients (Dénomination chimique / synonymes) | Numéro CAS et tout identificateur unique | Concentration (%) |
|---|--|-------------------|
| hydroxyde de sodium                             | 1310-73-2                                | 0.04              |

## SECTION 04 - FIRST AID MEASURES

|  |  |
|--|--|
| <b>Eye contact</b>   | Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention. |
| <b>Skin contact</b>  | Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.                          |
| <b>Inhalation</b>  | If breathed in, move person into fresh air. If breathing is difficult, give oxygen. Consult a physician.   |
| <b>Ingestion</b>   | If the person is conscious, give water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.     |
| <b>Most important symptoms and effects (acute and delayed)</b>         | Ref. section 11.   |
| <b>Immediate medical attention and special treatment, if necessary</b> | In case of medical consultation, keep this sheet available.  |
| <b>General advice</b>  | Show this safety data sheet to the doctor in attendance.   |

## SECTION 05 - FIREFIGHTING MEASURES

|  |   |
|--|---|
| <b>Flammability</b>  | No  |
| <b>Ignition conditions</b>   | Not flammable or combustible.   |
| <b>Suitable extinguishing media</b>                                  | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  |
| <b>Unsuitable extinguishing media</b>                                | Not applicable.   |
| <b>Hazardous combustion / decomposition products</b>                 | Hazardous decomposition products formed under fire conditions. - Sodium oxides.   |
| <b>Special fire and explosion hazards</b>                            | When concentrated, the product reacts according to the following characteristics: May react violently with incompatible products (Ref Section 10).  |
| <b>Special protective equipment and precautions for firefighters</b> | Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus. |

## SECTION 06 - ACCIDENTAL RELEASE MEASURES

|   |   |
|---|---|
| <b>Methods and materials for containment and cleaning up / Personal precautions, protective equipment</b> | Evacuate personnel to safe areas. Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Use breathing apparatus if necessary. Neutralize residues with dilute acid, then rinse with water. Do not let product enter drains. |
|---|---|

## SECTION 07 - HANDLING AND STORAGE

|                                    |   |
|------------------------------------|---|
| <b>Conditions for safe storage</b> | Store in a cool, dry place. Keep container tightly closed and store away from heat, water, moisture, and incompatible products. |
| <b>Methods of handling</b>         | Wear personal protective equipment when handling. Always ensure good ventilation. Transport according to TDG (ref Section 14)   |

## SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace control parameters

| Components       | CAS-No.  | Value | Control parameters         | Basis   |
|------------------|--|-------|----------------------------|---|
| Sodium hydroxide | 1310-73-2  | C     | 2.000000 mg/m <sup>3</sup> | Canada. British Columbia OEL  |
|                  |  | CEV   | 2.000000 mg/m <sup>3</sup> | Canada. Ontario OELs  |
|                  |  | (c)   | 2.000000 mg/m <sup>3</sup> | Canada. Alberta, Occupational Health and Safety Code (table 2: OEL) |
| Remarks          | Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required |       |                            |   |
|                  |  | C     | 2.000000 mg/m <sup>3</sup> | USA. ACGIH Threshold Limit Values (TLV)                             |
|                  |  | C     | 2 mg/m <sup>3</sup>        | USA. ACGIH Threshold Limit Values (TLV)                             |

|                            |  |
|----------------------------|--|
| <b>Data source</b>         | Sigma-Aldrich (Millipore Sigma)  |
| <b>Ventilation</b>         | Fan.   |
| <b>Respiratory</b>         | If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.  |
| <b>Gloves</b>              | Handle with gloves.  |
| <b>Eyes</b>                | Safety goggles with safety shutters.   |
| <b>Shoes</b>               | Safety shoes.  |
| <b>Clothing</b>            | Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.                                     |
| <b>Engineering control</b> | Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values. |

## SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

|                                       |   |
|---------------------------------------|---|
| Physical state                        | Liquid.   |
| Appearance                            | Liquide, incolore-  |
| Odour                                 | inodore.  |
| Odour threshold                       | Data not available  |
| pH                                    | 12.   |
| Melting point / Freezing point        | Data not available  |
| Initial boiling point                 | Data not available  |
| Boiling range                         | Data not available  |
| Flash point                           | Data not available  |
| Evaporation rate                      | Data not available  |
| Flammability                          | No  |
| Lower flammable / Explosive limit     | Data not available  |
| Upper flammable / Explosive limit     | Data not available  |
| Vapour pressure                       | Data not available  |
| Solubility                            | 1 g / 0.9 mL eau ; 1 g / 7.2 mL alcool absolu, 4.2 mL méthanol; soluble dans glycérol (NaOH). |
| Vapour density                        | Data not available  |
| Relative density                      | 1.00g/ml à 20°C   |
| Partition coefficient water/n-octanol | Data not available  |
| Auto-ignition temperature             | Data not available  |
| Decomposition temperature             | Data not available  |
| Viscosity                             | Data not available  |

## SECTION 10 - STABILITY AND REACTIVITY

|   |  |
|---|--|
| Reactivity  | Non-reactive under normal conditions.  |
| Chemical stability  | Stable under recommended storage conditions.   |
| Possibility of hazardous reactions  | Stable under normal conditions.  |
| Conditions of instability (Including sensitivity to shock / static discharge / vibration) | Avoid contact with incompatible materials and extreme temperatures.  |
| Incompatible material   | When pure, the product reacts with the following products: Strong oxidizing agents, strong acids, organic materials. |
| Hazardous decomposition products  | Hazardous decomposition products formed under fire conditions. - Sodium oxides.                                      |

## SECTION 11 - TOXICOLOGICAL INFORMATION

### SODIUM HYDROXIDE

|   |  |
|---|--|
| Routes of exposure                        | Ingestion, inhalation, skin and eyes.  |
| Acute exposition effects / symptoms:      | By exposure route below.   |
| - Eyes                                    | Severe burns and destruction of ocular tissue that can lead to corneal ulceration and blindness.   |
| - Skin                                    | May be harmful if absorbed through skin. Causes skin burns.  |
| - Inhalation                              | May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.  |
| Acute toxicity (Ingestion)                | Corrosion of the digestive tract, bloody vomiting with mucous membrane fragments, diarrhea, inflammation of the larynx and possibility of oesophageal and gastric perforation, death.  |
| Chronic exposure effects / symptoms       | Burning sensation, dermatitis, conjunctivitis, lung and eye damage, nerve disorders, chest pain, cough, dyspnea, laryngitis, headache, dizziness, confusion, irritability, sweating, salivation, tearing, fatigue, alopecia, loss weight loss and loss of appetite, seizures, nausea and vomiting. |
| DL50 (specify species and route of entry) | Oral rat: 140mg/kg Dermal rabbit: 1350mg/kg  |
| CL50 (specify species and route of entry) | LC50 - Inhalation - Data not available.  |

## SUMMARY

|                                      |   |
|--------------------------------------|---|
| Acute exposure effects / Symptoms:   | By exposure routes below.   |
| Ingestion                            | To our knowledge, the product has not been fully evaluated  |
| Inhalation                           | To our knowledge, the product has not been fully evaluated  |
| Skin                                 | To our knowledge, the product has not been fully evaluated  |
| Eyes                                 | To our knowledge, the product has not been fully evaluated  |
| Chronic exposure effects / Symptoms: | To our knowledge, the product has not been fully evaluated  |
| ETA Mix (Estimated Acute Toxicity)   | LD50 Oral: > 5000 mg/kg - Rat<br>LD50 Dermal: > 5000 mg/kg - Rabbit<br>LC50 Inhalation: No data available |

## SECTION 12 - ECOLOGICAL INFORMATION

|                               |   |
|-------------------------------|---|
| Ecotoxicity                   | Sodium hydroxide: Toxicity to fish: LC50 - Gambusia affinis (Mosquito fish) - 125 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates: CL50 - Oncorhynchus mykiss (Truite arc-en-ciel) - 45.4 mg/l - 96 h Immobilisation CE50 -Immobilization EC50 - Daphnia - 40.38 mg/l - 48 h. |
| Persistence and degradability | Data not available.   |
| Bioaccumulative potential     | Data not available.   |
| Mobility in soil              | Data not available.   |
| Other adverse effects         | An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.  |

## SECTION 13 - DISPOSAL CONSIDERATIONS

|                        |  |
|------------------------|--|
| Waste Disposal Method  | Neutralize by slowly adding a solution of low hydrochloric acid concentration to avoid sudden temperature rise and vapor emission. Neutralization can cause the formation of heat or vapors that must be controlled by the rate at which solutions are added. The solution thus neutralized can be disposed as a household waste. For large quantities, contact a specialist waste disposal company. |
| Contaminated Packaging | Dispose of as unused product.  |

## SECTION 14 - TRANSPORT INFORMATION

|                            |     |
|----------------------------|-----|
| UN Number                  | N/R |
| UN Proper shipping name    |     |
| Transport hazard class(es) |     |
| Packing group              |     |
| Limited quantity index     |     |
| ERAP Index                 |     |
| Special precautions        |     |

## SECTION 15 - REGULATORY INFORMATION

|              |  |
|--------------|--|
| WHIMS CANADA | Serious eye damage/eye irritation - Serious eye damage category 1<br>Skin corrosion/irritation - Skin corrosion category 1 |
|--------------|--|

## SECTION 16 - OTHER INFORMATION

### Further information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

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