

**Powdered Formalin Type 2, pH Driving Solution****1. Identification****Product Name:** Powdered Formalin Type 2, pH Driving Solution **Item #:** 8025, 8028, MA0102363 **Web SDS:** S420**Synonyms:** Sodium Hydroxide, Caustic soda, Lye, Soda lye, Sodium hydrate**Recommended Use:** Laboratory Reagent**Manufacturer:**BBC Biochemical
409 Eleanor Lane,
Mount Vernon, WA 98273
1-800-635-4477**Restrictions on Use:** Any use other than recommended**In Case of Emergency:**Chemtrec US 1-800-424-9300
Chemtrec International 703-527-3887**2. Hazards Identification****OSHA Hazard Classification(s):**Skin Corrosion - Category 1A
Eye Damage - Category 1**Signal Word:** Danger**Hazard Statement(s):** Causes severe skin burns and eye damage. Causes serious eye damage.**Pictogram(s):****Precautionary Statement(s):** Prevention: Do not breathe dusts or mists. Wash body thoroughly after handling. Wear protective gloves, protective clothing, eye protection and face protection. Wear eye protection, face protection.

Response: If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Take off all contaminated clothing and wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a doctor. Specific treatment (see first aid section on this label). If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with local regulations.

Descriptions of Hazards not otherwise classified: N/A**Percent of mixture with unknown acute toxicity:** N/A**3. Composition and Information on Ingredients**

Chemical Name	Common Name	CAS #	Concentration %
Sodium Hydroxide		1310-73-2	

4. First Aid Measures**Eye Contact:** Corrosive. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.**Skin Contact:** Corrosive. If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.**Inhalation:** Remove to fresh air; give artificial respiration if breathing has stopped. Get medical advice/attention if you feel unwell.**Ingestion:** Corrosive to internal tissue. Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.**Symptoms:** Irritation eyes, nose, throat; headache, dizziness, chemical burns**Recommendations for immediate medical care/special treatment:** Get medical advice/attention if you feel unwell.



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5. Fire- Fighting Measures

Extinguishing Media: Dry chemical, carbon dioxide, alcohol foam, water.

Fire Hazards (Chemical): Not flammable.

Special Protective Equipment: Fire fighters should use self-contained breathing apparatus and protective clothing.

Precautions for Firefighters: Carbon monoxide and unidentified organic compounds may be formed during combustion.

6. Accidental Release Measures

Emergency Procedures: Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate all sources of ignition and provide ventilation.

Protective Equipment: See section 8

Environmental Precautions: Prevent release to the environment by using barriers.

Containment and Clean-Up Procedures: Use barriers to prevent spreading. Collect spill in container. Call waste authorities.

7. Handling and Storage

Handling: Do not breathe vapors. Do not eat, drink or smoke when using this product.

Storage: Store locked up.

8. Exposure Controls/Personal Protection

OSHA Permissible Exposure Limits (PELs):

Reagent	CAS #	OSHA PEL TWA
Sodium Hydroxide	1310-73-2	2 mg/m ³

ACGIH Threshold Limit Values (TLVs):

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
Sodium Hydroxide	1310-73-2	2 mg/m ³ Ceiling	

Engineering Controls: Use in a well ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.

Personal Protective Measures: Wear gloves, lab coat, eye protection and impervious footwear. Contact lenses should not be worn when working with this material.

Special PPE Requirements: If ventilation hood not available wear respirator.

9. Physical and Chemical Properties Section

Appearance: Opaque, Clear Liquid

Molecular Weight: 40.00

Molecular Formula: NaOH

pH: N/A

Boiling Point and Boiling Range: N/A

Melting Point/Freezing Point: N/A

Flash Point: N/A

Specific Gravity/Relative Density: 0.000

Odor: Pungent

Odor Threshold: N/A

Color: Opaque

Flammability (solid/gas): N/A

Vapor Density: N/A

Upper/Lower flammability or explosive limits: N/A

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Vapor Pressure: N/A
Evaporation Rate: N/A
Partition Coefficient: n-octanol/water: N/A
Viscosity: N/A
Auto-ignition temperature: N/A
Solubility: N/A
Decomposition Temperature: N/A

10. Stability and Reactivity

Reactivity: N/A
Chemical Stability: Stable
Conditions of Stability/Instability: Stable under normal storage and handling conditions.
Stabilizers needed: None
Safety issue indicated by appearance change: N/A
Other: Hygroscopic.
Hazardous Reactions: N/A
Hazardous Polymerization: Does not occur
Conditions to avoid: N/A
Classes of Incompatible Materials: Oxidizers, Strong Acids, Strong Bases
Hazardous Decomposition Products: Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors (I.e. Carbon monoxide) may be released in a fire.

11. Toxicological Information**Likely Routes of Exposure**

Eyes: Corrosive! Causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness

Skin: Corrosive! Contact with skin can cause irritation or severe burns and scarring with greater exposures.

Inhalation: Severe irritant. Effects from inhalation of mist vary from mild irritation to serious damage of the upper respiratory tract, depending on severity of exposure. Symptoms may include sneezing, sore throat or runny nose. Severe pneumonitis may occur.

Ingestion: Corrosive! Swallowing may cause severe burns of mouth, throat, and stomach. Severe scarring of tissue and death may result. Symptoms may include bleeding, vomiting, diarrhea, fall in blood pressure. Damage may appear days after exposure.

Signs or Symptoms of Exposure: Loss of appetite, inability to concentrate. Headache, irritation of eyes, nose, throat. Nausea.

Effects from short term exposure (delayed, immediate, chronic): Irritation to the eyes, nose, throat; headache, dizziness, nausea.

Acute Toxicity (Numerical Measures): N/A

Carcinogenicity (NTP, IARC, OSHA): N/A

12. Ecological Information

Ecotoxicity: Sodium Hydroxide: Toxicity to fish: LC50-Gambusia affinis (mosquito fish)-125mg/l-96h; LC50-oncorhynchus mykiss (rainbow trout)-45.5mg/l-96h Toxicity to daphnia and another aquatic invertebrates: Immobilization EC50-aphnia-40.38mg/l-48h

Persistence and degradability: N/A

Bioaccumulation Potential (octanol-water partition coefficient, BCF): N/A

Mobility in the soil: N/A

Adverse Environmental Effects: Harmful to aquatic life.

13. Disposal Considerations

Recommended Disposal Containers: Check with your local waste authorities*

Recommended Disposal Methods: Do not dispose of in drains, check with your local waste authorities.*

Physical/Chemical Properties affecting Disposal: See section 2 and section 9 applicable information.*



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Special Precautions for Landfill and Incineration Activities: Check with your local waste authorities.*

Waste Stream: Consult your local or regional authorities.*

14. Transport Information

UN Number: UN1824

UN Proper Shipping Name: Sodium Hydroxide Solution

Transport Hazard Class(es): 8

Packing Group Number: III

Environmental Hazards (IMDG code):

Marine Pollutant: No

Transport in Bulk (IBC Code): N/A

Special Transport Precautions: N/A

15. Regulatory Information

OSHA: N/A

DOT: N/A

EPA: N/A

CPSC: N/A



Safety Data Sheet

Powdered Formalin Type 2, pH Driving Solution

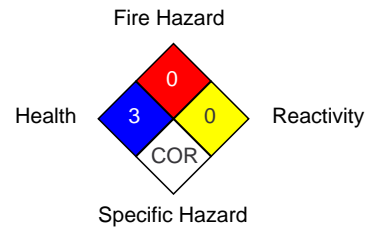
16. Other Information

Revision Date: 11/15/2017

NFPA

Health	3
Fire Hazard	0
Reactivity	0
Specific Hazard	COR

National Fire Protection Association (USA) NFPA



HMIS

Health	3
Flammability	0
Physical Hazard	0
Personal Protection	2

Hazardous Material Information System HMIS

Health	3
Flammability	0
Physical Hazard	0
Personal Protection	2

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