



Safety Data Sheet

Powdered Formalin Type 2, Pack A

1. Identification

Product Name: Powdered Formalin Type 2, Pack A

Item #: 8025, 8027

Web SDS: S419

Synonyms: N/A

Recommended Use: Laboratory Reagent

Restrictions on Use: Any use other than recommended

Manufacturer:

In Case of Emergency:

BBC Biochemical

Chemtec US 1-800-424-9300

409 Eleanor Lane,

Chemtec International 703-527-3887

Mount Vernon, WA 98273

1-800-635-4477

2. Hazards Identification

OSHA Hazard Classification(s):

Flammable Solids - Category 2

Acute Toxicity - Oral - Category 4

Acute Toxicity - Inhalation - Category 4

Skin Irritation - Category 2

Eye Irritation - Category 2A

Sensitization - Skin - Category 1B

Carcinogenicity - Category 2

Signal Word: Warning

Hazard Statement(s): Flammable solid. Harmful if swallowed. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Suspected of causing cancer.

Pictogram(s):



Precautionary Statement(s): Prevention: Keep away from heat sources and open flame. No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting and equipment. Wear protective gloves, eye protection, face protection. Wash body thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing dust, vapors. Use only outdoors or in a well-ventilated area. Wear protective gloves. Wear eye protection, face protection. Contaminated work clothing must not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection and face protection.

Response: In case of fire: Use water, dry chemical, CO2 or foam to extinguish. If swallowed: Call a doctor if you feel unwell. Rinse mouth. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell. If on skin: Wash with plenty of water. Specific treatment (see first aid section on this label). If skin irritation or rash occurs: Get medical attention. Take off all contaminated clothing and wash it before reuse. 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 attention. If exposed or concerned: Get medical attention.

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 % |
|------------------|-------------|------------|-----------------|
| Paraformaldehyde | | 30525-89-4 | 100% |

4. First Aid Measures



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Eye Contact: 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: 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: 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

Recommendations for immediate medical care/special treatment: Get medical advice/attention if you feel unwell.

5. Fire- Fighting Measures

Extinguishing Media: Dry chemical, carbon dioxide, alcohol foam, water. Use water spray to cool fire-exposed containers and disperse vapors.

Fire Hazards (Chemical): OSHA classified Flammable Solid

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. Vapors can travel distances to ignition source and flash back. Cool fire exposed containers with water. Fine mist or spray may be flammable at temperatures below the flash point. When heated above the flash point this material emits flammable vapors which, when mixed with air, can burn or be explosive.

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. Keep away from heat, sparks, open flames, hot surfaces. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Storage: Store locked up. Store in a well-ventilated, cool, dry place. Keep container tightly sealed when not in use. Keep away from sources of ignition, heat and open flame.

8. Exposure Controls/Personal Protection

OSHA Permissible Exposure Limits (PELs):

| Reagent | CAS # | OSHA PEL TWA |
|--------------|---------|--------------|
| Formaldehyde | 50-00-0 | 0.75 ppm |

ACGIH Threshold Limit Values (TLVs):

| Reagent | CAS # | ACGIH PEL TLV | ACGIH STEL |
|--------------|---------|---|------------|
| Formaldehyde | 50-00-0 | 0.3 ppm (0.37mg/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.



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9. Physical and Chemical Properties Section

Appearance: White, White, granular powder
Molecular Weight: N/A
Molecular Formula: N/A
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: N/A
Odor Threshold: N/A
Color: White
Flammability (solid/gas): N/A
Vapor Density: N/A
Upper/Lower flammability or explosive limits: N/A
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: Not Reactive
Chemical Stability: Stable
Conditions of Stability/Instability: Stable under normal conditions of temperature and pressure.
Stabilizers needed: None
Safety issue indicated by appearance change: N/A
Other: N/A
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: Irritation. May cause permanent damage or redness to cornea. May cause pain if in eyes. Exposure to high vapor concentrations or contact with dust causes tearing and severe irritation. Contact with dust can cause severe burns.

Skin: Irritation. May cause permanent damage or redness to skin. May cause pain or chemical burns. Continuous exposure over time causes a skin sensitization. Contact with dust causes drying, cracking, and scaling.

Inhalation: Dizziness, headache, nausea. Contains reagents suspected to cause mutations to germ cells and toxic effects on reproductive organs. Contains carcinogen paraformaldehyde, may cause cancer over long exposure times. Irritation to nose, throat, and respiratory system. May cause inflammation of lining of nose, throat, and lungs with bronchopneumonia and edema possible from extreme exposure.

Ingestion: May cause allergic reaction or nausea. Severe stomach pains will follow with possible loss of consciousness.

Signs or Symptoms of Exposure: Nausea. Cancer in nose, changes to reproductive system or germ cell mutation. A



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sensitization to skin. Prolonged and repeated contact causes a hardening or tanning effect. Repeated exposure may also cause allergic dermatitis or asthma. May harm kidneys.

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

Acute Toxicity (Numerical Measures): Paraformaldehyde: LD50(oral, rat)=800mg/kg, LC50(inhalation, rat)-1070mg/m³/4H

Carcinogenicity (NTP, IARC, OSHA): Contains Paraformaldehyde carcinogen as formaldehyde. IARC Group 2B "Possibly carcinogenic to humans".

12. Ecological Information

Ecotoxicity: Toxicity to fish: LC50-Oncorhynchus mykiss (rainbow trout)-30.3mg/l-96H Toxicity to daphnia and other aquatic invertebrates: EC50-Daphnia magna (Water flea)-33.2 mg/l-48H Toxicity to algae-static test EC50-Desmodesmus subspicatus (green algae)->400mg/l-72H

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.*

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: UN2213

UN Proper Shipping Name: Paraformaldehyde

Transport Hazard Class(es): 4.1

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



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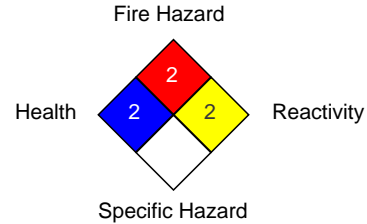
16. Other Information

Revision Date: 05/16/2017

NFPA

| | |
|-----------------|---|
| Health | 2 |
| Fire Hazard | 2 |
| Reactivity | 2 |
| Specific Hazard | |

National Fire Protection Association (USA) NFPA



HMIS

| | |
|---------------------|---|
| Health | 2 |
| Flammability | 2 |
| Physical Hazard | 0 |
| Personal Protection | 2 |

Hazardous Material Information System HMIS

| | |
|---------------------|---|
| Health | 2 |
| Flammability | 2 |
| Physical Hazard | 0 |
| Personal Protection | 2 |

Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.