



## 4% Paraformaldehyde Bag A

### 1. Identification

**Product Name:** 4% Paraformaldehyde Bag A

**Synonyms:** Powdered Formalin

**Recommended Use:** N/A

**Manufacturer:**

BBC Biochemical  
409 Eleanor Lane,  
Mount Vernon, WA 98273  
1-800-635-4477

**Item #:** 8016, 8015, 8017

**Web SDS:**

**Restrictions on Use:** N/A

**In Case of Emergency:**

Chemtec US 1-800-424-9300  
Chemtec International 703-527-3887

### 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  
Germ Cell Mutagenicity - Category 2  
Toxic to Reproduction - Category 2  
Specific Target Organ Toxicity (repeated exposure) - 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. Suspect of causing genetic defects. Suspected of damaging fertility of the unborn child. May cause damage to organs (nose, lungs) through prolonged or repeated exposure.

**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. P0 Wear protective gloves, protective clothing, eye protection and face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust, vapors.

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



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Chemical Name	Common Name	CAS #	Concentration %
Paraformaldehyde		30525-89-4	Trade Secret
Select Buffers		Trade Secret	Trade Secret

### 4. First Aid Measures

**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, dermatitis, skin irritation or burns, nausea.

**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:** Fire fighters should use self-contained breathing apparatus and protective clothing.

### 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 place away from heat and ignition sources. Keep sealed until ready to use. Follow instructions.

### 8. Exposure Controls/Personal Protection

#### OSHA Permissible Exposure Limits (PELs):

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

#### ACGIH Threshold Limit Values (TLVs):

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
Formaldehyde	50-00-0	0.3ppm (0.37mg/m <sup>3</sup> ) Ceiling	

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



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**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:** White, 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:** N/A

**Odor:** N/A

**Odor Threshold:** N/A

**Color:** White

**Flammability (solid/gas):** Flammable solid

**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:**

**Chemical Stability:** Stable

**Conditions of Stability/Instability:** N/A

**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



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extremely irritating exposure.

**Ingestion:** May cause allergic reaction or nausea. Irritation to throat and respiratory system. 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 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: D50(oral,rat)=800 mg/kg, LC50(inhalation,rat)=1070 mg/m<sup>3</sup>/4H Select Buffer (Trade Secret): LD50(oral,rabbit)=404 mg/kg, LD50(oral,dog)=500 mg/kg

**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:**

**DOT:**

**EPA:**

**CPSC:**



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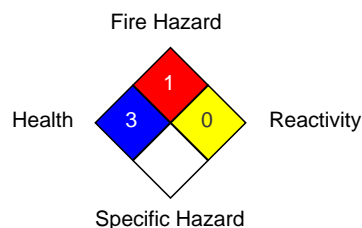
### 16. Other Information

Revision Date: 03/14/2014

#### NFPA

Health	3
Fire Hazard	1
Reactivity	0
Specific Hazard	

National Fire Protection Association (USA) NFPA



#### HMIS

Health	3
Flammability	1
Physical Hazard	0
Personal Protection	

Hazardous Material Information System HMIS

Health	3
Flammability	1
Physical Hazard	0
Personal Protection	

#### Notice to Reader:

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