

1. Identification

Product Name:	Phosphate-Buffered 4% Paraformaldehyde, 1000 ml
CAT#:	PF101
Recommended Use:	Lab products for research use only.
Restrictions on Use:	Not for drug, diagnostic or other uses.
Supplier Details:	FD NeuroTechnologies, Inc. 9125 Guilford Rd, Suite 108 Columbia, MD 21046, U.S.A. Tel: +1 301-490-8878/ 301-490-8898 Fax: +1 301-490-4146
Emergency Number:	+1 410-916-1442

2. Hazard Identification

Classification:

Globally Harmonised System according to OSHA (29 CFR 1910.1200, 2026)

Serious Eye Damage/ Eye Irritation – Category 1

Skin Sensitization – Category 1

Carcinogenicity – Category 1B

Germ cell mutagenicity : Category 2

Acute toxicity (Inhalation) : Category 4

Signal Word:

Harmful

Hazard Statement(s):

Harmful by inhalation or in contact with skin or eyes. May be toxic if swallowed or absorbed through skin. Readily absorbed through skin and irritating to mucous membrane. Possible risk of irreversible damage to eyes and kidneys by inhalation, in contact with skin or if swallowed. Potential cancer hazard.



Precautionary Statement(s):

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust, fume, gas, mist, vapors, or spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, protective clothing, eye protection, and face protection.

Hazards Classified Under Paragraph (d)(1)(ii) of § 1910.1200:

No data available.

Hazards Not Otherwise Classified:

None identified.

3. Composition/Information on Ingredients

Substance/ Mixture: Mixture

Components:

Chemical name	CAS Number	Concentration	Trade Secret
Formaldehyde	50-00-0	$\geq 3\% - \leq 7\%$	The actual concentration is withheld as a trade secret

4. First Aid Measures

Eye Contact:

Wash immediately with copious amounts of water and immediately call a physician.

Skin Contact:

Wash immediately with copious amounts of water and immediately call a physician.

Inhalation:

Remove to fresh air, give oxygen or artificial respiration when necessary, and immediately call a physician.

Ingestion:

Wash out mouth with water and immediately call a physician.

Most Important Symptoms/ Effects, Acute and Delayed:

Causes eye burns. Causes severe eye damage. May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

5. Fire-fighting measures

Suitable Extinguishing Media:

Carbon dioxide (CO₂). Powder. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media:

No information available.

Specific Hazards Arising From the Chemical:

No further relevant information available.

Special Protective Equipment and Precautions for Fire-Fighters:

As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

6. Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures:

Ensure adequate ventilation. Use personal protective equipment as required. Should not be released into the environment.

Methods and Materials for Containment and Cleaning Up:

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. Handling and Storage

Precautions for Safe Handling:

Wear glasses and disposable gloves while handling this reagent. Wear appropriate protective clothing. Do not pipette by mouth. Avoid inhalation. Avoid contact with skin and eyes. Use in a properly functioning chemical hood, which is vented to the outside. Wash hands thoroughly after handling this reagent.

Conditions for Safe Storage:

Keep container tightly closed all time. Store at room temperature.

8. Exposure Controls/ Personal Protection

Ingredients with workplace control parameters:

Component	CAS Number	Form of Exposure	Control Parameters	Basis
Formaldehyde	50-00-0	TLV	Time Weighted Average: 0.1 ppm Short-Term Exposure Limit: 0.75 ppm	ACGIH
		PEL	Time Weighted Average: 0.75 ppm Short-Term Exposure Limit: 2 ppm	OSHA
		REL	Time Weighted Average: 0.016 ppm Ceiling Value: 0.1 ppm	NIOSH

TVL - Threshold Limit Value

PEL - Permissible Exposure Limit

REL -Recommended Exposure Limit

Engineering Controls:

No data available.

General Protective Measures:

Keep away from food, beverages, and animal feed. Remove contaminated clothing immediately. Wash hands thoroughly before breaks and after handling the product. Store protective clothing separately. Avoid contact with eyes and skin.

Respiratory Protection:

Use a respiratory filter device for short-term exposure or when contamination levels are low. For extended exposure or higher contamination levels, use respiratory protective equipment that operates independently of ambient air.

Hand Protection:

Gloves must be made of a material that is impermeable to and resistant against the product, its ingredients, and the preparation. As no specific testing data are available, no recommendation can be made regarding a particular glove material. The selection of glove material should be based on penetration time, diffusion rate, and degradation characteristics.

Eye Protection:

Wear eye protection that complies with applicable safety standards, such as ANSI/ISEA Z87.1 (United States) or EN 166 (European Union). Use tightly fitting safety glasses or chemical splash goggles as appropriate for the hazard.

9. Physical and chemical properties

Physical State:	Liquid
Color:	Colourless
Odor:	No data available
Melting point:	No data available
Freezing point:	No data available
Boiling point:	No data available
Flammability:	Not Flammable
Lower and upper explosion limit:	No data available
Flammability limit:	No data available
Flash point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH:	7.0 ~ 7.4
Kinematic viscosity:	No data available
Solubility:	Completely miscible soluble (68 °F / 20 °C)
Partition coefficient n-octanol/water:	No data available
Vapor pressure:	No data available
Density:	No data available
Relative density:	No data available
Relative vapor density:	No data available
Particle characteristics:	No data available

10. Stability and reactivity

Reactivity:	No data available.
Chemical stability:	Stable at normal temperature and pressure.
Possibility of hazardous reactions:	No hazardous reactions known.
Conditions to avoid:	No data available.
Incompatible materials:	No data available.
Hazardous decomposition products:	No dangerous decomposition products known.

11. Toxicological information

Acute Toxicity:

Oral: No data available.

Inhalation: No data available.

Dermal: No data available.

Skin Corrosion/ Irritation:

Irritant to skin and mucous membranes.

Serious Eye Damage/ Irritation:

Causes serious eye damage.

Respiratory or Skin Sensitization:

May cause an allergic skin reaction.

Carcinogenic Categories:

Possible carcinogen.

IARC: 1 - Group 1: Carcinogenic to humans (Formaldehyde: 50-00-0)

NTP: Known - Known to be human carcinogen (Formaldehyde: 50-00-0)

OSHA: OSHA specifically regulated carcinogen (Formaldehyde: 50-00-0)

Other information

The information provided is believed to be accurate; however, it does not constitute a warranty of any specific product characteristics and does not establish a legally binding contractual relationship. This information is intended solely as a guideline based on current knowledge of the substance or mixture and is provided to support appropriate safety handling and use. FD NeuroTechnologies, Inc. assumes no liability for any damages arising from handling or contact with the product described above. For additional terms and conditions of sale, please refer to www.fdneurotech.com and/or the reverse side of the packing slip.