



Safety Data Sheet

Perfusion Solution

1. Identification

Product Name: Perfusion Solution**Item #:** MA0102209**Web SDS:****Synonyms:** N/A**Recommended Use:** N/A**Manufacturer:**BBC Biochemical
409 Eleanor Lane,
Mount Vernon, WA 98273
1-800-635-4477**Restrictions on Use:** N/A**In Case of Emergency:**Chemtrec US 1-800-424-9300
Chemtrec International 703-527-3887

2. Hazards Identification

OSHA Hazard Classification(s):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):** 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 (lungs, kidneys) through prolonged or repeated exposure.**Pictogram(s):****Precautionary Statement(s):** Prevention: Wash body thoroughly after handling. Wear protective gloves. Wear eye protection, face protection. Avoid breathing dust, vapors. 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: 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. Call a doctor if you feel unwell.

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 %
Sucrose	Sugar	57-50-1	Trade Secret
Sodium Cacodylate Trihydrate		6131-99-3	Trade Secret
Paraformaldehyde	Powdered Formaldehyde	30525-89-4	Trade Secret
Water		7732-18-5	Trade Secret



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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. May cause sensitization to skin after repeat exposure. 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. Target organs: Kidneys and lungs.

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.

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. Store in a well-ventilated, cool place. Keep lid tightly closed until ready to use. Store away from sunlight

8. Exposure Controls/Personal Protection

OSHA Permissible Exposure Limits (PELs):

Reagent	CAS #	OSHA PEL TWA
Sodium Cacodylate Trihydrate	6131-99-3	0.5 mg(As)/m ³
Paraformaldehyde	30525-89-4	0.75ppm (as Formaldehyde)

ACGIH Threshold Limit Values (TLVs):

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
Paraformaldehyde	30525-89-4		2.0ppm (as Formaldehyde)

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: Colorless to light yellow, Liquid

Molecular Weight: N/A

Molecular Formula: N/A



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pH: 7.2-7.4
Boiling Point and Boiling Range: 101°C
Melting Point/Freezing Point: -6°C
Flash Point: N/A
Specific Gravity/Relative Density: N/A
Odor: N/A
Odor Threshold: N/A
Color: Colorless to light yellow
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: Soluble in water.
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, Arsenic compounds) may be released in a fire.

11. Toxicological Information

Likely Routes of Exposure

Eyes: Irritation.
Skin: Irritation. May cause sensitization to skin upon repeat exposure.
Inhalation: Dizziness, headache. May irritate lungs. Repeat exposure may cause toxic effects on lungs or kidneys. Toxic if inhaled.
Ingestion: Nausea. Toxic if swallowed.

Signs or Symptoms of Exposure: Nausea, dizziness, headaches. Breathing difficulties. Prolonged, repeat exposure may cause cancer to kidneys or lungs. Prolonged, repeat exposure may cause germ cell mutations, toxicity to reproductive organs.

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): Contains IARC Group 2B "Possibly carcinogenic to humans" dimethylarsinic acid. Contains IARC Group 2B "Possibly carcinogenic to humans" Formaldehyde.

12. Ecological Information

Ecotoxicity: Sodium Cacodylate: Toxicity to daphnia and other aquatic invertebrates: EC50-Daphnia magna (water



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flea)-53.5mg/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: Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

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: Not regulated.

UN Proper Shipping Name:

Transport Hazard Class(es):

Packing Group Number:

Environmental Hazards (IMDG code):

Marine Pollutant:

Transport in Bulk (IBC Code):

Special Transport Precautions:

15. Regulatory Information

OSHA:

DOT:

EPA:

CPSC:



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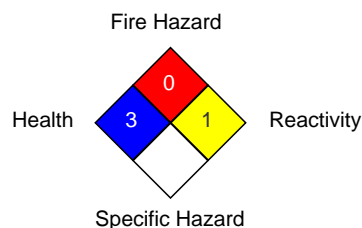
16. Other Information

Revision Date: 06/09/2014

NFPA

Health	3
Fire Hazard	0
Reactivity	1
Specific Hazard	

National Fire Protection Association (USA) NFPA



HMIS

Health	3
Flammability	0
Physical Hazard	1
Personal Protection	

Hazardous Material Information System HMIS

Health	3
Flammability	0
Physical Hazard	1
Personal Protection	

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