



BIOPHARM INC.

SAFETY DATA SHEET

1. Identification:

Product Identifier: Potassium Dichromate Solution
Product code: BP4370 = 0.100 N
Synonym(s): No information found.
Recommended use: Manufacture of other chemical products, professional, scientific, and technical activities.
Recommended restrictions: None known.

Manufacturer/Supplier/Distributor Information

Company name: Biopharm Inc.
Address: 187 South Tilley Road
Hatfield, AR 71945
Telephone: (870) 389-6114
Website: www.bphchem.com
E-mail: support@bphchem.com
Emergency phone number: Chemtrec 800-424-9300

2. Hazard(s) identification:

Classification: GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Carcinogenicity Category 1 A

Label elements:



Signal word: Danger

Hazard statement: Harmful if inhaled.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause allergic skin reaction.
May cause genetic defects.
May cause cancer.
May damage fertility. May damage the unborn child.

Precautionary statement:

Prevention Obtain special instruction before use.
Do not handle until all safety precautions have been read and understood.
Use personal protective equipment as required.
Use only outdoors or in a well-ventilated area.
Do not breathe dust/fume/gas/mist/vapors/spray.

Response If exposed or concerned: Get medical advice/attention.

Storage Store locked up.
Store in a well-ventilated place. Keep container tightly closed.

Disposal Dispose of contents/container to an approved waste disposal plant.

Hazard(s) not otherwise classified (HNOC): Harmful to aquatic life with long lasting effects.
WARNING! This product contains a chemical known in the State of California to cause cancer, birth defects or other reproductive harm.

Supplemental information: None.

3. Composition/information on ingredients

Mixtures

<u>Chemical Name</u>	<u>CAS number</u>	<u>%</u>
Water	7732-18-5	99.5-99.75
Potassium Dichromate	7778-50-9	0.25-0.5

4. First-aid measures

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. Immediately contact medical personnel.

Ingestion: Do not induce vomiting. Call a physician or Poison Control Center immediately.

Skin contact: Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

Most important symptoms/effects, acute and delayed: No information available.

General information: Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media: Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Unsuitable extinguishing media: No information available.

Specific hazards arising from the chemical: Non-combustible, substance itself does not burn, but may decompose upon heating to produce corrosive and/or toxic fumes.

Special protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus (pressure-demand), MSHA/NIOSH (approved or equivalent) and full protective gear.

Fire-fighting equipment/instructions: No information available.

6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures: Use personal protective equipment. Evacuate personnel to safe areas. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing.

Methods and materials for containment and cleaning up: Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

Environmental precautions: Avoid release to the environment. See Section 12 for additional ecological information. Do not flush surface water or sanitary sewer system. Should not be released into the environment. Do not allow material to contaminate ground water system.

7. Handling and storage

Precautions for safe handling: Use only under a chemical fume hood. Wear personnel protective equipment. Do not get in eyes, on skin, or on clothing. Do not breathe vapors or spray mist. Do not ingest.

Conditions for safe storage, including any incompatibilities: Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection

Exposure Guidelines:

<u>Component</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>
Potassium Dichromate	None established	None established

Engineering measures: Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment:

Eye/face protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance: Liquid; Orange

Odor: Odorless

Odor threshold: No data available.

Vapor Pressure (mm Hg): No data available.

Vapor density (Air = 1): No data available.

pH: No data available.

Relative density: No data available.

Melting point/freezing point: No data available.

Solubility in Water: No data available.

Boiling Point (°F): No data available.

Flash point:	No data available.
Evaporative Rate (H₂O = 1):	No data available.
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits	
Flammability limit - lower	No data available.
Flammability limit - upper	No data available.
Explosive limit - lower	No data available.
Explosive limit - upper	No data available.
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available
Other information:	
Specific Gravity (H₂O = 1):	No data available.
Percent Volatile by Volume:	No data available.

10. Stability and reactivity

Reactivity:	None known, based on information available.
Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	None under normal processing.
Conditions to avoid:	Incompatible products. Excess heat.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	Chromium oxide, potassium oxides.

11. Toxicological information

Information on likely routes of exposure:

Ingestion:	May cause stomach irritation.
Inhalation:	May cause difficulty breathing.
Skin Contact:	May cause irritation.
Eye Contact:	May cause redness or irritation.

Information on toxicological effects

Acute toxicity

<u>Component</u>	<u>LD50 Oral</u>	<u>LD50 Dermal</u>	<u>LC50 Inhalation</u>
Water	-	Not listed	Not listed

Potassium Dichromate	130 mg/kg (Rat)	1150 mg/kg (Rabbit)	0.09 mg/L/4h (Rat)
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/ irritation	No information available.
Serious eye damage/ irritation	May cause irritation to eyes on contact.
Respiratory Sensitization	May cause sensitization by inhalation.
Skin sensitization	May cause sensitization by skin contact.
Carcinogenicity	No data available.
Mutagenic effects	Mutagenic effects have occurred in humans.
Reproductive effects	May impair fertility.
STOT – single exposure	No data available.
STOT – repeated exposure	No data available.
Aspiration hazard	No data available.
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity:

Do not empty into drains. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains the following substances which are hazardous for the environment. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water systems.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Potassium Dichromate	Not Listed	LC50: =26 mg/L, 96h static (Morone saxatilis) LC50: 23-41.2 mg/L, 96h static (Poecilia reticulata) LC50: 24.81-34.55 mg/L, 96h semi-static (Poecilia reticulata) LC50: 14-20.9 mg/L, 96h static (Pimephales promelas) LC50: 15.41 - 30.36 mg/L, 96h flow-through (Pimephales promelas) LC50: 21.209 - 30.046 mg/L, 96h semi-static (Oryzias latipes) LC50: = 12.3 mg/L, 96h semi-static (Oncorhynchus mykiss) LC50: 65.6 - 137.6 mg/L, 96h static (Lepomis macrochirus) LC50: = 320 mg/L, 96h (Lepomis macrochirus) LC50: 113.6 - 155.7 mg/L, 96h flow-through (Lepomis macrochirus) LC50: > 139 mg/L, 96h static (Cyprinus carpio)	Not Listed	EC50: 1.4 mg/L 24h

Persistence and degradability: Immiscible with water. May persist.

Bioaccumulation/Accumulation: No data available

Mobility in soil: Is not likely mobile in the environemtn due to its low water solubility.

Other adverse effects:

13. Disposal considerations

Waste disposal methods: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT: Not regulated as dangerous goods.

15. Regulatory information

U.S. Federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated
U.S. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not regulated
CERCLA Hazardous Substances List (40 CFR 302.4)	Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories	Immediate Hazard – No
	Delayed Hazard – Yes
	Fire Hazard – No
	Pressure Hazard – No
	Reactivity Hazard – No

Other Federal regulations

Clean Air Act	Not applicable
Clean Water Act	Not applicable
California Prop 65	This product does not contain any Proposition 65 chemicals.

16. Other information, including date of preparation or last revision

Revision date January 27, 2017

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