SAFETY DATA SHEET



Version 1.3

According to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Revision Date: 03/19/2020

SECTION 1. Identification

Product identifier

Catalog number:	P3U010501-01, P3U010501-05, P3U010501-100, P3U010501-1000
Product name :	PurMa [™] General Water Bath Treatment
Size :	100 ml, 500 ml, 6X 100, 6X 1000ml
Category : Tissue Culture Reagent	
Relevant identified uses of the substance or mixture:	

Identified uses: Use is for treating water bath to make it pathogen free in Laboratory. **Details of the supplier of the safety data sheet** company information:

PurMa Biologics, LLC.

801 SW 89th St, Suit No: A2

Oklahoma City, OK 73139-9354

United States of America

General Inquiries: +1-877-720-6116, Monday to Friday, 9:00 AM to 5:00 PM central Time (GMT-5)

SECTION 2. Hazards identification

GSH Classification of the substance or mixture

Skin Irritant (Category 2)

Serious eye Irritant (Category 2)

Harmful if swallowed (Category 4)

Harmful in contact with skin (Category 4)

Causes damage to organs through prolong or repeated exposure (Category 2)

GHS-Label elements including precautionary statements Pictogram:



Signal word: Danger

Hazard statement(s):

- H302-----Harmful if swallowed.
- H314 -----Causes severe skin burns and eye damage.
- H335-----May cause respiratory irritation
- H410 -----Very toxic to aquatic life with long lasting effects.

Precautionary statements:

- P264----- Wash skin thoroughly after handling.
- P273------ Avoid release to the environment.
- P280 ------ Wear protective gloves/protective clothing/eye protection/face protection
- P301 + P310 + P330 IF SWALLOWED- ----- Immediately call a POISON CENTER/doctor. Rinse mouth
- P302+ P352------ IF ON SKIN: Wash with plenty of soap and water
- P304+ P340 +P 313----Do not breathe dust/fume/gas/mist/vapors/spray

P305 + P351 + P338 ---- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

- P312----- Call a POISON CENTER/ doctor if you feel unwell.
- P403 + P235 ------Store in a well-ventilated place. Keep cool.
- P405 -----Store locked up.
- P501 -----Dispose of contents/ container to an approved waste disposal plant.

HMIS Rating:

- Health hazard: 3
- Flammability: 0 Physical Hazard: 0 NFPA Rating:

Health hazard:3Fire Hazard:0Reactivity Hazard:0

Hazards not otherwise classified (HNOC) or not covered by GHS

None

SECTION 3. Composition/information on ingredients

Formulation: Mixture of inorganic and organic chemicals Hazardous component(s):

Component	Cas Number	Concentration
Benzalkonium chloride	68424-85-1	0.0005%-3%

Further information: Proprietary

SECTION 4. First aid measure

Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes

Inhalation: Move to fresh air. If breathing becomes difficult, give oxygen **Ingestion:** Clean mouth with water and afterwards drink plenty of water **Notes to Physician:** Treat symptomatically.

SECTION 5. Fire-fighting measures

Suitable extinguishing media: Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Advice for firefighters:

Protective actions during firefighting: Fight fire from safe distance or protected location. Use water spray to reduce vapors. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak.

Special protective equipment for firefighters: Use air-supplied respirator, gloves and protective goggles. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

Use protective equipment appropriate for surrounding materials.

SECTION 6. Accidental release measures:

Personal Precautions: Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Methods and Materials for Containment and Cleaning Up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Environmental Precautions: Prevent discharge into the environment. Stop leakage and do not allow material to enter drains

SECTION 7. Handling and storage

Precautions for safe handling: Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product.

Conditions for safe storage: Store in a tightly closed container at room temperature (15°C to 25° C)

SECTION 8. Exposure controls/personal protection

Control parameters: Contains no substances with occupational exposure limit values.

Engineering Controls: A system of local and/or general exhaust is recommended to keep employee exposures low. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source.

Individual protection measures:

Eye/face protection: Use chemical safety goggles and/or a full-face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection: Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection:

For conditions of use where exposure to the dust or mist is apparent, a full-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive pressure, air-supplied respirator

SECTION 9. Physical and chemical properties

Physical state	: Liquid
Color	: Blue
Odor	: No information available
РН	: No information available
Freezing point	: No information available
Boiling point	: No information available
Flash point	: No information available
Evaporation rate	: No information available
Vapor pressure	: No information available.
Relative vapor density	: No information available
Density	: No information available.
Relative density	: No information available.
Water Solubility	: soluble
Explosive properties	: Not classified as explosive.
Viscosity	: No information available

Hazardous Polymerization: Will not occur under normal conditions of use

SECTION 10. Stability and reactivity

Reactivity: No information available
Chemical stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: None under normal processing.
Conditions to avoid: Excess heat, Spark
Incompatible materials: Strong oxidizing agents. Strong reducing agents
Hazardous decomposition products: Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas

SECTION 11. Toxicological information

Information on toxicological effects

Acute toxicity: (From Benzalkonium chloride)

LD50 Oral - Mouse - 150 mg/kg

Remarks: Behavioral: Somnolence (general depressed activity). Blood: Hemorrhage. LD50 Dermal - Rat - 1,420 mg/kg

Remarks: Behavioral: Somnolence (general depressed activity). Blood: Hemorrhage.

Symptoms of Toxicity in human: No data available

Respiratory or skin sensitization: No data available **Mutagenicity**: No information available **Carcinogenicity**:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity: No information available

Teratogenicity: No information available

Aspiration Hazard: No data available

Additional Information

RTECS: Not available

SECTION 12. Ecological information

Ecotoxicity:

Chemical Name	Toxicity to Fish
Benzalkonium chloride	mortality LOEC - Oncorhynchus
	kisutch - 17.8 mg/l
	- 3.0 d LC50 - Lepomis macrochirus -
	0.31 mg/l - 96.0 h mortality NOEC - Oncorhynchus
	kisutch - 10 mg/l -
	3.0 d

Persistence and degradability: No information available

Bio accumulative potential: No information available

Mobility in soil: No information available

PBT and vPvB assessment: No information available

Other Adverse Effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life

SECTION 13. Disposal considerations

Waste treatment methods:

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Dispose accordance with all federal, state, and local regulations

Contaminated packaging: Dispose of as unused product. Dispose accordance with all federal, state, and local regulations.

SECTION 14. Transport information

Land transport (DOT): Not classified as dangerous in the meaning of transport regulations.

Air transport (IATA): Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG): Not classified as dangerous in the meaning of transport regulations.

SECTION 15. Regulatory information United States of America SARA 313

SARA 302 Component(s):

The following components are subject to reporting levels established by SARA Title III, Section 302:

Benzalkonium chloride 68424-85-1

SARA 313 Component(s):

The following components are subject to reporting levels established by SARA Title III, section 313:

Benzalkonium chloride	68424-85-1
SARA 311/312 Hazard categories:	

Acute Health Hazard:

Massachusetts Right To Know Components:

Benzalkonium chloride 68424-85-1

Pennsylvania Right To Know Components:

Benzalkonium chloride	68424-85-1
New Jersey Right To Know Components:	

Benzalkonium chloride	68424-85-1

California Prop. 65 Components:

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Clean Water Act: Following component need to report:

Benzalkonium chloride	68424-85-1
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SECTION 16. Other information

Key or legend to abbreviations and acronyms used in the safety data sheet Used abbreviations and acronyms can be looked up at <u>www.wikipedia.org</u>.

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