

Material Safety Data Sheet

Section 1 - Product and Company Identification

- 1.1 **Product Name:** Aqua Guard 2 Disinfectant Solution
- 1.2 **Catalog Number:** 01-916-01
- 1.3 **Synonyms:** Bronopol, 2-Bromo-2-nitro-1,3-propanediol
- 1.4 **Product Use:** AQUAGUARD-2 is intended for disinfecting various kinds of water baths from bacteria and fungi. The active ingredient in Aquaguard-2 is safe to humans and does not cause any irritating effects to the skin when used in the recommended concentration (0.02%) .
- 1.5 **Manufacturer/Supplier:** Biological Industries Israel Beit Haemek Ltd.
Address: Kibbutz Beit Haemek, 25115, Israel
- 1.6 **General Information:** +972-(0)4-9960595
Transportation Emergency Number: NA

Section 2 - Hazards Identification

2.1 GHS Classification:

Health	Environmental	Physical
H302; H312; H315; H318; H335	H400	NA

GHS Label: Warning

Symbols:



Hazard Statements	Precautionary Statements
H302: Harmful if swallowed H317: Harmful in contact with skin H315: Causes skin irritation H318: Causes serious eye damage H335: May cause respiratory irritation H400: Very toxic to aquatic life	P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P273: Avoid release to the environment. P280: Wear protective gloves/ eye protection/ face protection. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Section 3 - Composition / Information on Ingredients

3.1

Component	CAS Number	Weight %
Bronopol	52-51-7	<15%

Section 4 - First Aid Measures

- 4.1 Eyes:** In case of eye irritation, flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get immediate medical attention.
- 4.2 Skin:** Itching or irritation of the skin is likely. In case of skin contact, immediately flush the skin with plenty of water and soap while removing contaminated clothing and shoes. Wash contaminated clothing before reuse.
- 4.3 Ingestion:** Ingestion of mixture is unlikely. Get immediate medical attention. Do not induce vomiting unless directed by medical personnel.
- 4.4 Inhalation:** Irritation by inhalation is possible. In case of Nasal irritation, headache, dizziness, nausea, vomiting, heart palpitations, breathing difficulty, cyanosis, tremors, weakness, red flushing of face, irritability: Remove exposed person from source of exposure to fresh air. If not breathing, clear airway and start cardiopulmonary resuscitation (CPR). Avoid mouth-to-mouth resuscitation.

Section 5 - Fire Fighting Measures

- 5.1 Suitable Extinguishing Media:** Use water, dry chemical, foam, or carbon dioxide to extinguish fire.
- 5.2 Fire Fighting Procedures:** Exposed firefighters should wear protective clothing.
- 5.3 Unusual Fire and Explosion Hazards:** Carbon oxides, nitrogen oxides (NOx), Hydrogen bromide gas
- 5.4 Combustion Products:** NA.



Section 6 - Accidental Release Measures

6.1 Avoid spillage getting into drains

Section 7 - Handling and Storage

- 7.1 **Handling:** Do not allow contact with eyes or skin. Keep container closed. Use only with adequate ventilation. Use good personal hygiene practices. Wash hands before eating, drinking, smoking. Remove contaminated clothing and clean before re-use.
- 7.2 **Storage:** Store in tightly closed containers Frozen in a -20°C environment. Keep containers tightly closed and upright when not in use. Protect against physical damage.

Section 8 - Exposure Controls/Personal Protections

- 8.1 **Exposure Limits:** not limited
- 8.2 **Engineering Controls:** Not needed. To be diluted according to instructions.
- 8.3 **Personal Protective Equipment (PPE):**
- 8.3.1 **Eye Protection:** Wear safety goggles. Have eye-wash stations available where eye contact can occur.
- 8.3.2 **Skin Protection:** Avoid skin contact. Wear gloves impervious to conditions of use.
- 8.3.3 **Respiratory Protection:** NA

Section 9 - Physical/Chemical Protections

- 9.1 **Flashpoint:** NA
- 9.2 **Autoignition Temperature:** NA
- 9.3 **Boiling Point:** NA
- 9.4 **Melting Point:** NA
- 9.5 **Vapor Pressure:** NA
- 9.6 **Vapor Density (Air=1):** NA
- 9.7 **% Solubility in Water:** complete @ 20°C
- 9.8 **Pour Point:** NA
- 9.9 **Molecular Formula:** Mixture Solution
- 9.10 **Odor/Appearance:**
- 9.11 **Lower Flammability Limit:** NA
- 9.12 **Upper Flamimability Limit:** NA
- 9.13 **Specific Gravity:** NA
- 9.14 **% Volatile:** 100
- 9.15 **Evaporation Rate (Water=1):**
- 9.16 **Viscosity:** NA
- 9.17 **Octanol/Water Partition Coefficient:** NA
- 9.18 **pH:**



Section 10 - Stability / Reactivity

- 10.1 **Stability/Incompatibility:** Strong oxidizing agents, Strong bases, Strong reducing agents
- 10.2 **Hazardous Reactions/Decomposition Products:** NA

Section 11 - Toxicological Information

- 11.1 **Signs and Symptoms of Overexposure:** NA
- 11.2 **Acute Effects:** Not expected
- 11.3 **Eye Contact:** May Cause irritation and damage.
- 11.4 **Skin Contact:** May cause reddening of skin. May cause skin irritation.
- 11.5 **Inhalation:** May cause irritation
- 11.6 **Ingestion:** May cause gastrointestinal irritation.
- 11.7 **Target Organ Effects:** NA
- 11.8 **Chronic Effects:** NA.
- 11.9 **Medical Conditions Aggravated by Exposure:** NA
- 11.10 **Acute Toxicity Values**
- Oral LD₅₀ (Rat) = NA
- Dermal LD₅₀ (Rabbit) = NA
- Inhalation LC₅₀ (Rat) = NA

Section 12 - Ecological Information

- 12.1 Not Available.
- 12.2 Bioaccumulation is not expected to be significant. This product is readily biodegradable.

Section 13 - Disposal Considerations

- 13.1 The transportation, storage, treatment and disposal of this waste material must be conducted in compliance with Local regulations. Offer surplus and non-recyclable solutions to a licensed disposal company.

Section 14 - Transport Information

- 14.1 **U.S. Department of Transportation (DOT)**
- 14.1.1 **Proper Shipping Name:** 2-BROMO-2-NITROPROPANE-1,3-DIOL
- 14.1.2 **Hazard Class:** 4.1
- 14.1.3 **UN/NA Number:** 3241
- 14.1.4 **Packing Group:** III
- 14.1.5 **Labels Required:** Warning
- 14.2 **International Maritime Organization (IMDG)**
- 14.2.1 **Proper Shipping Name:** 2-BROMO-2-NITROPROPANE-1,3-DIOL
- 14.1.2 **Hazard Class:** 4.1
- 14.1.3 **UN/NA Number:** 3241
- 14.1.4 **Packing Group:** III



Section 15 - Regulatory Information
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NA

15.1 EU Classification:**EU Risk (R) and Safety (S) Phrases:**

Acute toxicity, Dermal (Category 4), H312

Acute toxicity, Oral (Category 4), H302

Specific target organ toxicity - single exposure (Category 3), H335

Skin irritation (Category 2), H315

Serious eye damage(Category 1), H318

Acute aquatic toxicity (Category 1), H400

N Dangerous for the environment

Xn Harmful

R21/22 Harmful in contact with skin and if swallowed.

R37/38 Irritating to respiratory system and skin.

R41 Risk of serious damage to eyes.

R50 Very toxic to aquatic organisms.

Section 16 - Other Information

16.1 National Fire Protection Association (NFPA) Ratings:

This information is intended solely for the use of individuals trained in the NFPA system.

16.2 Health:

3

16.3 Flammability:

1

16.4 Reactivity:

0

16.5 Revision Indicator:

3.0 Adapted to GHS guidelines

16.6 Disclaimer:

The information contained herein is accurate to the best of our knowledge. My Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.

