

SECTION 1: IDENTIFICATION

Product Name: BioAssay Works Sample Diluent Buffer (SDB)

Catalog Number(s): W102
SDB-### (Where ### indicates the volume of the product provided)

Manufacturer: BioAssay Works
10075 Tyler Place
Suite 18
Ijamsville, MD 21754

Product Information: 1-301-874-8888

Emergency Phone Number: Contact Local Poison Control Center or 1-800-222-1222

Transport Emergency: CHEMTREC: 1-800-424-9300 (outside the U.S. 1-703-527-3887)

The product should be handled by trained laboratory personnel in a laboratory environment as indicated on the package insert/instructions. Not for consumption.

SECTION 2: HAZARD(S) IDENTIFICATION

The Sample Diluent Buffer is an aqueous solution containing approximately 94% water and less than 0.01% 2-Methyl-2H-isothiazol-3-one. ***There is no data available on the toxicity, hazards or precautions at the supplied concentrations of the components. The following information pertains to 2-Methyl-2H-isothiazol-3-one at a concentration of 5-10% and other components in their undiluted states.***

Classification:

- Acute toxicity, Oral (Category 4), H302
- Acute toxicity, Inhalation (Category 3), H331
- Skin corrosion (Category 1A), H314, H315
- Serious eye damage (Category 1), H318, H319
- Skin sensitization (Category 1), H317
- Specific target organ toxicity – single exposure (Category 3), Respiratory system, H335
- Acute aquatic toxicity (Category 1), H400
- Chronic aquatic toxicity (Category 1), H410

Pictograms:



Signal Word: DANGER

NFPA 704 Rating: Health Hazard: 3
Fire Hazard: 0
Reactivity Hazard: 0



HMIS® III - Hazardous Materials Identification System:

Health Hazard: 3
Flammability: 0
Physical Hazard: 0
Personal Protection: D = Faceshield, Gloves,
Protective Apron



Chemical Name	
HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	D

Hazard Statements:

- H302 Harmful if swallowed
- H314 Causes severe skin burns and eye damage
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H318 Causes serious eye damage
- H319 Causes serious eye irritation
- H331 Toxic if inhaled
- H335 May cause respiratory irritation
- H400 Very toxic to aquatic life
- H410 Very toxic to aquatic life with long lasting effects

Precautionary Statements:

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 Wash skin thoroughly after handling
- P270 Do not eat, drink or smoke when using this product
- P271 Use only in a well-ventilated area
- P272 Contaminated work clothing should not be allowed out of the workplace
- P273 Avoid release to the environment
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- P302 + P352 IF ON SKIN: Wash with soap and water
- P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – Continue rinsing
- P310 Immediately call a POISON CENTER or doctor/physician
- P312 Call a POISON CENTER or doctor/physician if you feel unwell
- P333 + P313 If skin irritation or a rash occurs: Get medical advice/attention
- P363 Wash contaminated clothing before reuse
- P391 Collect spillage
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed
- P405 Store locked up
- P501 Dispose of contents/container to an approved waste disposal service/plant

Hazards not otherwise classified: none

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	EC #	REACH Reg. #	Concentration (% by weight)	Classification
Water	7732-18-5	231-791-2	Not Applicable	93.683-94.018	-
2-Methyl- 2H-isothiazol-3-one	2682-20-4	220-239-6	Not Applicable	0.005-0.01	* Acute Tox. 4; Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1; STOT SE 3; Aquatic Acute 1; H302, H314, H317, H331, H335, H400
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride	1185-53-1	214-684-5	Not Applicable	0.298-0.315	Xi;R36/37/38
Tris (hydroxymethyl) aminomethane	77-86-1	201-064-4	Not Applicable	0.229-0.242	Xi;R36/37/38
Sodium Chloride	7647-14-5	231-598-3	Not Applicable	1.66-1.75	Xi;R36/37/38
Urea	57-13-6	200-315-5	Not Applicable	2.85-3	-
Bovine Serum Albumin	9048-46-8	232-936-2	Not Applicable	0.47-0.5	-
Polyethylene glycol sorbitan monooleate	9005-65-6	500-019-9	Not Applicable	0.47-0.5	-

* Refer to Section 2

SECTION 4: FIRST-AID MEASURES

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Treat symptomatically.

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

Skin Contact: Take off contaminated clothing and shoes immediately. Wash off with soap and copious amounts of water. Consult a physician.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are listed in Sections 2 and 11.

Indication of immediate medical attention and special treatment needed, if necessary: No Data Available

SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Specific hazards arising from the substance or mixture: Carbon oxides, Nitrogen oxides (NO_x), Sulfur oxides

Special protective equipment and precautions for fire-fighters: Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Avoid contact with skin, eyes and clothing. Use personal protective equipment (refer to Section 8). Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Methods and materials for containment and cleaning up: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed/sealed containers for disposal (refer to Section 13).

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling: Handle in accordance with cGMP, good industrial hygiene and safety practice. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a well-ventilated place. Recommended storage temperature: 2-8°C. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: Contains no substances with occupational exposure limit values

Engineering controls: Showers, eyewash stations and ventilation systems - Handle in accordance with cGMP, good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

Personal Protective Equipment:

Eye/face protection: Snuggly fitting safety goggles or faceshield (8 inch minimum) – Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (U.S.) or EN 166 (E.U.)

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching the glove's outer surface) to avoid possible skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and cGMP. Wash hands with soap and copious amounts of water.

Body protection: Complete suit protecting against chemicals – The type of protective equipment must be chosen according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator with multipurpose combination (U.S.) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (U.S.) or CEN (E.U.).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear liquid – Aqueous solution
Odor:	No Data Available
Odor Threshold:	No Data Available
pH:	7.5 to 8.5
Melting Point/Freezing Point:	No Data Available
Initial Boiling Point and Boiling Range:	100°C (212°F)
Flash Point:	No Data Available
Evaporation Rate:	No Data Available
Flammability (solid, gas):	No Data Available (product is a non-flammable liquid)
Upper/Lower Flammability or Explosive Limits:	No Data Available (product is a non-flammable liquid)
Vapor Pressure:	No Data Available
Vapor Density:	No Data Available
Relative Density:	≈ 1.0 g/mL at STP
Solubility:	Water soluble – Currently an aqueous solution
Partition Coefficient: n-octanol/water:	No Data Available
Auto-Ignition Temperature:	No Data Available
Decomposition Temperature:	No Data Available
Viscosity:	No Data Available
Explosive Properties:	No Data Available (Not Applicable)
Oxidizing Properties:	No Data Available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No Data Available

Chemical Stability: Stable under recommended storage conditions (refer to Section 7)

Possibility of Hazardous Reactions: No Data Available

Conditions to Avoid: No Data Available

Incompatible Materials: Strong oxidizing agents, Amines, Mercaptans, Reducing agents

Hazardous Decomposition Products: Carbon oxides, Nitrogen oxides (NO_x), Sulfur oxides

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

LD50 **Oral** - rat - female - 1,091 mg/kg

LD50 **Oral** - rat - male - 2,834 mg/kg

Inhalation: No Data Available

LD50 **Dermal** - rabbit - > 5,000 mg/kg

Skin corrosion/irritation:

Skin – rabbit Result: Causes severe burns.

Serious eye damage/eye irritation

Eyes – rabbit Result: Corrosive

Respiratory or skin sensitization

Guinea pig – May cause allergic skin reaction.

Germ cell mutagenicity

No Data Available

Carcinogenicity

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

ACGIH: No component of this product which is present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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

Reproductive toxicity

No Data Available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No Data Available

Aspiration hazard

No Data Available

Additional Information

RTECS: Not Available

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Very toxic to aquatic life

Persistence and Degradability: No Data Available

Bioaccumulative Potential: No Data Available

Mobility in Soil: No Data Available

Other Adverse Effects: No Data Available – 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. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated Packaging: Dispose of as unused product (refer to above paragraph)

SECTION 14: TRANSPORT INFORMATION

U.S. DOT HAZARD CLASSIFICATION

Proper Shipping Name: Not Regulated

UN Number: Not Applicable

Hazard Class/Packing Group: Not Applicable

Labels Required: None

DOT Packaging Requirements: Not Applicable

Exceptions: Not Applicable

IATA/ICAO AIR TRANSPORTATION

Proper Shipping Name: Not Regulated

UN Number: Not Applicable

Hazard Class/Packing Group: Not Applicable

Labels Required: None

IATA Packaging Requirements: Not Applicable

IMDG: Not Regulated

SECTION 15: REGULATORY INFORMATION

REACH Number: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This material contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 371.

SARA 311/312 Hazards: Acute Health Hazard

California Proposition 65: This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990. This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: OTHER INFORMATION

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The information included in this Material Safety Data Sheet is believed to be accurate, complete and current but does not purport to be all inclusive and shall be used as a guide. BioAssay Works makes no representation or warranties with respect to the product described herein, including but not limited to any implied warranties or merchantability or fitness for a particular use. BioAssay Works assumes no liability or responsibility and authorizes no other person to assume any additional liability or responsibility as a result of the use of this product or the information contained in the Material Safety Data Sheet.

