



7040 Virginia Manor Road
Beltsville, MD 20705, USA
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Material Safety Data Sheet

Section 1. Identification of the Substance/Mixture

Product name: Buffer AP3

Manufacturer/Supplier identification

ABP Biosciences
7040 Virginia Manor Road, Beltsville, MD 20705, USA
Web: www.abpbio.com
Tel: 301-658-7993
Email: info@abpbio.com

For research use only. Not for use in diagnosis procedures

Section 2. Hazards Identification

GHS Classification

Signal Word: Warning



Hazard pictograms:

Health hazards:

Acute oral toxicity	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/irritation	Category 2A

Physical hazards: Not classified

Environmental hazards: Not classified

Hazard Statements:
H302 Harmful if swallowed
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary Statements

Prevention:
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313 - If skin irritation occurs: Get medical advice/attention.
P337 + P313 - If eye irritation persists: Get medical advice/

Disposal: attention.
P501 - Dispose of contents/container to an approved waste disposal plant.

Other hazards: Contains a known or suspected endocrine disruptor.

HMIS

Health	2
Flammability	0
Reactivity	0

Section 3. Composition/Information on Ingredients

Substance/Mixture: Mixture

Substance name: Buffer AP3

Chemical Name	CAS No.	Weight-%
Guanidine hydrochloride	50-01-1	10-50

We recommend handling all chemicals with caution.

Section 4. First Aid Measures

Description of first aid measures

Skin contact Rinse with plenty of water. Immediate medical attention is not required.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

Inhalation Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

Notes to Physician Treat symptomatically.

Most important symptoms and effects, both acute and delayed

H302 - Harmful if swallowed H315 - Causes skin irritation H319 - Causes serious eye irritation.

Indication of any immediate medical attention and special treatment needed

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. If skin irritation occurs: Get medical advice/ attention. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Section 5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media Water spray. Carbon dioxide (CO₂). Foam. Dry chemical.

Unsuitable extinguishing media No information available.

Special hazards arising from the substance or mixture



Not known

Protective equipment and precautions for firefighters

Standard procedure for chemical fires.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation
Always wear recommended Personal Protective Equipment
Use personal protection equipment
See section 8 for more information

Environmental precautions

Prevent product from entering drains. Do not allow material to contaminate ground water system.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Reference to other sections

See section 8 for more information.

Section 7. Handling and Storage

Precautions for safe handling

Use personal protective equipment as required. No special handling advices are necessary.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Specific end use(s)

For research use only.

Section 8. Exposure Controls/Personal Protection

Control parameters

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Hazardous components without workplace control parameters

Ingredients	CAS No.
Guanidine hydrochloride	50-01-1

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Exposure controls

Personal Protective Equipment

Respiratory protection

In case of insufficient ventilation wear respirators and components tested and approved under appropriate government

	standards.
Hand protection	Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.
Eye protection	Tight sealing safety goggles.
Skin and Body Protection	Wear suitable protective clothing.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice
Environmental exposure controls	
Prevent product from entering drains. Do not allow material to contaminate ground water system.	

Section 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	liquid
Odor	No data
Odor Threshold	No data
Melting point / melting range	°C No data
Boiling point / boiling range	°C No data
Flash point	°C No data
Autoignition Temperature	°C No data
Decomposition temperature	°C No data
Evaporation rate	No data
Flammability (solid, gas)	No data
Upper explosion limit	No data
Lower explosion limit	No data
Vapor Pressure	No data
Vapor density	No data
Relative density	No data
Specific gravity	No data
Solubility	No data
Partition coefficient:	
n-octanol/water	No data
Viscosity	No data
Explosive properties	No data
Oxidizing properties	No data
Other information	No data.

Section 10. Stability and Reactivity

Reactivity	No decomposition if stored and applied as directed.
Chemical stability	Stable under normal conditions.
Possibility of hazardous	Hazardous reaction has not been reported.



reactions

- Conditions to avoid** No information available.
- Incompatible materials** No dangerous reaction known under conditions of normal use.
- Hazardous decomposition products** No data available

Section 11. Toxicological information

Information on toxicological effects

Chemical Name	ID50 (oral, rat/mouse)	ID50 (dermal, rat/rabbit)	ID50 (inhalation, rat/mouse)
Guanidine hydrochloride	475 mg/kg	>2000 mg/kg (Rabbit)	No data available

Principal Routes of Exposure

- Acute toxicity** Harmful if swallowed.
- Skin corrosion/irritation** Skin irritation
- Serious eye damage/irritation** Irritating to eyes
- Respiratory or skin sensitization** Data are conclusive but insufficient for classification
- Specific target organ toxicity (STOT)–single exposure** Data are conclusive but insufficient for classification
- Specific target organ toxicity (STOT)–repeated exposure** Data are conclusive but insufficient for classification
- Carcinogenicity** Data are conclusive but insufficient for classification
- Germ cell mutagenicity** Data are conclusive but insufficient for classification
- Reproductive toxicity** Data are conclusive but insufficient for classification
- Aspiration hazard** Data are conclusive but insufficient for classification

Section 12. Ecological Information

Ecotoxicity

Hazardous to the Aquatic Environment.

Persistence and degradability No information available.

Bioaccumulative potential No information available.

Results of PBT and vPvB assessment

No information available.

Other adverse effects Contains a known or suspected endocrine disruptor.

Section 13. Disposal considerations

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations. Do not empty into drains. Do not dispose of waste into sewer.

Section 14. Transport Information

IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations

UN number Not Applicable

UN proper shipping name Not Applicable

Transport hazard class(es) Not Applicable

Packing group Not Applicable

Environmental hazards Not Applicable

Special precautions for user Not Applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not Applicable.

Section 15. Regulatory Information

US Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

D2B - Toxic materials

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

Section 16. Other Information

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and



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mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

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End of Material Safety Data Sheet