SAFETY DATA SHEET

Cat# S233-1 EZBlock™ Protease Inhibitor Cocktail XVI **SDS DATE: 13APR2015**

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: EZBlock™ Protease Inhibitor Cocktail XVI

PRODUCT CODES: Cat# S233-1

MANUFACTURER: BioVision, Inc.
ADDRESS: 155 S. Milpitas Boulevard, Milpitas, CA 95035

EMERGENCY PHONE: 858-373-8066
CHEMTREC PHONE:
OTHER CALLS: 408-493-1800
FAX PHONE: 408-493-1801

SECTION 2: HAZARDS IDENTIFICATION

Product Name/Chemical Name	Description	Volume	Safety Information
EZBlock™ Protease Inhibitor Cocktail XVI	Solid (contains AEBSF)	1 vial	See below

AEBSF:
Emergency Overview
OSHA Hazards: Combustible Liquid, Target Organ Effect, Corrosive
Target Organs: Eyes, Skin
GHS Classification: Flammable liquids (Category 4)
Skin corrosion (Category 1B)
Serious eye damage (Category 1)
GHS Label elements, including precautionary statements
Pictogram:

Signal word: warning
Hazard statement(s): H302: Harmful if swallowed
H314: Causes severe skin burns and eye damage
Precautionary statement(s): 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.
P310 Immediately call a POISON CENTER or doctor/ physician.

HMIS Classification
Health hazard: 2
Chronic Health Hazard: *
Flammability: 0
Physical hazards: 0
NFPA Rating
Health hazard: 2
Fire: 0
Reactivity Hazard: 0
Potential Health Effects
Inhalation: May be harmful if inhaled.
Skin: May be harmful if absorbed through skin. Causes skin burns.
Eyes: Causes eye burns.
Ingestion: May be harmful if swallowed.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	EC-No.	MW	Concentration	Chemical Formula
AEBSF, HCl	30827-99-7	--	239.69	200 mM	$C_8H_{10}FNO_2 \cdot HCl$
Bestatin	58970-76-6	--	308.42	1.7 mM	$C_{16}H_{24}N_2O_4$
E-64	66701-25-5	--	357.41	200 µM	$C_{15}H_{27}N_5O_5$
EDTA, disodium	6381-92-6	--	372.24	800 mM	$C_{10}H_{14}N_2Na_2O_8$
Pepstatin A	26305-03-3	247-600-0	685.89	2 mM	$C_{34}H_{63}N_5O_9$

SECTION 4: FIRST AID MEASURES

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration.
In case of skin contact: Wash off with soap and plenty of water.

In case of eye contact: Flush eyes with water as precaution.
If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water.

5: FIRE-FIGHTING MEASURES

Condition of flammability: Not flammable or combustible.
Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.
Hazardous combustion products: Hazardous combustion products formed under fire conditions— not data available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid dust formation. Avoid breathing vapors, mist, gas, or dust. Ensure adequate ventilation.
Environmental precautions: Do not let product enter drains.
Methods for cleaning up: Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling
Provide appropriate exhaust ventilation at places where dust is formed.
Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature: -20 °C

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.
Personal protective equipment

Respiratory protection
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand 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.

Eye protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin and body protection
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Hygiene measures
General industrial hygiene practice.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	EZBlock™ Protease Inhibitor Cocktail XVI
Appearance:	Lyophilized solid
pH:	No data available
Water Solubility:	Soluble
Other Solubility:	DMSO
Specific Gravity (g/ml):	No data available
Boiling Point (°C):	No data available
Melting Point (°C):	No data available
Flash Point (°C):	No data available
Ignition Temperature (°C):	No data available

SECTION 10: STABILITY AND REACTIVITY

Property	EZBlock™ Protease Inhibitor Cocktail XVI
Chemical stability	Stable under recommended storage conditions
Conditions to avoid:	Not data available
Materials to avoid:	Strong oxidizing agents, strong acids, strong bases
Hazardous decomposition products:	No data available

SECTION 11: TOXICOLOGICAL INFORMATION

EZBlock™ Protease Inhibitor Cocktail XVI
Acute toxicity: no data available
Skin corrosion/irritation: no data available
Serious eye damage/eye irritation: no data available
Respiratory or skin sensitization: no data available
Germ cell mutagenicity: no data 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.
ACGIH:	No component of this product 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 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 identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available
Teratogenicity: no data available
Specific target organ toxicity – single exposure (GHS): no data available
Specific target organ toxicity – repeated exposure (GHS): no data available
Aspiration hazard: no data available
Potential Health Effects
Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
Skin: May be harmful if absorbed through skin. May cause skin irritation.
Eyes: May cause eye irritation.
Ingestion: May be harmful if swallowed.
Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Synergistic effects: no data available
Additional information: RTECS: not available

SECTION 12: ECOLOGICAL INFORMATION

EZBlock™ Protease Inhibitor Cocktail XVI
Persistence and degradability: no data available
Toxicity: no data available
Bioaccumulative potential: no data available
Mobility in soil: no data available
PBT and vPvB assessment: no data available
Other adverse effects: no data available

SECTION 13: DISPOSAL CONSIDERATIONS

Product: Observe all federal, state, and local environmental regulations.
Contaminated packaging: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

AEBSF:
DOT (US) UN number: 3261 Class: 8 Packing group: II
Proper shipping name: Corrosive solid, acidic, organic, n.o.s. (4-(2-Aminoethyl) benzenesulfonylfluoride hydrochloride)
Marine pollutant: No
Poison Inhalation Hazard: No
IMDG UN number: 3261 Class: 8 Packing group: II EMS-No: F-A, S-B
Proper shipping name: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (4-(2-Aminoethyl) benzenesulfonylfluoride hydrochloride)
Marine pollutant: No
IATA UN number: 3261 Class: 8 Packing group: II
Proper shipping name: Corrosive solid, acidic, organic, n.o.s. (4-(2-Aminoethyl) benzenesulfonylfluoride hydrochloride)

SECTION 15: REGULATORY INFORMATION

EZBlock™ Protease Inhibitor Cocktail XVI
OSHA Hazards: Target Organ Effect, Corrosive
SARA 302 Components: SARA 302: No chemical in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title II, Section 313.
SARA 311/312 Hazards: [4-(2-Aminoethyl) benzenesulfonylfluoride hydrochloride: Acute health hazard
Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right To Know Components: [4-(2-Aminoethyl) benzenesulfonylfluoride hydrochloride], CAS-No. 30827-99-7.

New Jersey Right To Know Components: [4-(2-Aminoethyl) benzenesulfonylfluoride hydrochloride], CAS-No. 30827-99-7.
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.

EU regulations

Component	Risk Phrases	Safety Phrases
EZBlock™ Protease Inhibitor Cocktail XVI	R10, R34, R36/37/38	S24/25,S26, S36/37/39, S45

SECTION 16: OTHER INFORMATION

OTHER INFORMATION:
PREPARATION INFORMATION:
DISCLAIMER:
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. BioVision, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.