425 Fortune Blvd. Milford, MA 01757

## **SAFETY DATA SHEET**

## **SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION**

**1.1** PRODUCT NAME: BioAcryl-P Acrylamide/Bis-acrylamide (40%, 39:1)

CATALOG #: BAC-40

**1.2** RECOMMENDED USE: Research Use or Further Manufacturing

**1.3** COMPANY IDENTIFICATION: Boston BioProducts, Inc.

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**1.4** EMERGENCY CONTACT: 1-800-535-5053 TOLL FREE NUMBER: 1-888-881-8691

#### **SECTION 2 - HAZARDS IDENTIFICATION**

# 2.1 Classification of the substance or mixture GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H301	Acute toxicity, oral	Category 3
H332	Acute toxicity, inhalation	Category 4
H312	Acute toxicity, dermal	Category 4
H315	Skin irritation	Category 2
H319	Eye irritation	Category 2A
H317	Skin sensitization	Category 1
H350	Carcinogenicity	Category 1B
H372	Specific target organ toxicity, repeated exposure, peripheral nervous system	Category 1
H402	Acute toxicity	Category 3

# 2.2 GHS Label elements, including Hazard and Precautionary Statement(s) Pictogram



Signal word: Danger

#### **Hazard statement(s)**

H301	Toxic if swallowed.
H332	Harmful in contact with skin or if inhaled.
H312	Causes skin irritation.
H315	May cause an allergic skin reaction.

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H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child.
H372	Causes damage to organs (Peripheral nervous system) through prolonged or repeated exposure if swallowed.
H402	Harmful to aquatic life.

Prevention, Response, Storage and Disposal Precautionary Statement(s)

revention, respon	se, Storage and Disposar Frecautionary Statement(s)
P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe 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 outdoors or 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 + P310 + P330	IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth
P302 + P352 + P312	IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

# SECTION 3- COMPOSITION/INFORMATION ON INGREDIENTS

**Composition:** Mixture of 40% Acrylamide and Bis-Acrylamide (39:1 Ratio).

Component	CAS#	Concentration
Acrylamide / N,N'- Methylenebis(acrylamide)	79-06-1 / 110-26-9	40.0% (39:1)
Water	7732-18-5	Rest



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## **SECTION 4 - FIRST-AID MEASURES**

#### 4.1 Description of first aid measures

General advice: Consult a doctor and show this safety data sheet.

- **i. If inhaled:** Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.
- **ii. In case of skin contact:** Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.
- iii. In case of eye contact: Flush with copious amounts of water for at least 15 minutes. Consult a doctor.
- **iv. If swallowed:** Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.
- **4.2 Most important symptoms and effects, both acute and delayed:** To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.
- **4.3 Indication of immediate medical attention and special treatment needed:** Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

## **SECTION 5 - FIRE FIGHTING MEASURES**

#### 5.1 Extinguishing media

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

- 5.2 Special hazards arising from the substance or mixture: No Data Available.
- **5.3 Precautions for fire-fighters:** Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.
- **5.4 Further information:** No data available

## **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

- **6.1 Personal precautions, protective equipment and emergency procedures:** Do not take action without suitable protective clothing see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.
- **6.2 Environmental precautions:** Do not let product enter drains.
- **6.3 Methods and materials for containment and cleaning up:** Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.
- **6.4 Reference to other sections:** For required PPE see section 8. For disposal see section 13.

#### **SECTION 7 - HANDLING AND STORAGE**

- **7.1 Precautions for safe handling:** Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.
- **7.2** Conditions for safe storage, including any incompatibilities: Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use. Keep in a dry place.
- 7.3 Specific end use(s): Use in a laboratory fume hood where possible



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#### **SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### 8.1 Control parameters

**Components with workplace control parameters:** Contains no substances with occupational exposure limit values.

#### 8.2 Exposure Controls

**i. Appropriate engineering controls:** Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

## 8.3 Personal protective equipment

- **i. Eye/face protection:** Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- **ii. Skin protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166
- **iii. Body Protection:** Wear appropriate protective clothing. Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- **iv. Respiratory Protection:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
- v. Control of environmental exposure: Do not let product enter drains

## **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties

Appearance	Liquid	Vapor Pressure	No Data Available	
Odor	No Data Available	Vapor Density	No Data Available	
Odor Threshold	No Data Available	Relative Density	No Data Available	
pH	No Data Available	Water Solubility	No Data Available	
Melting / Freezing Point	No Data Available	Partition Coefficient	No Data Available	
Initial Boiling Point Range	No Data Available Auto-Ignition Temperature		No Data Available	
Flash Point	No Data Available	Decomposition Temperature	No Data Available	
Evaporation Rate	No Data Available	Viscosity	No Data Available	
Flammability (Solid, Gas)	No Data Available	Explosive Properties	No Data Available	
Upper / Lower Flammability Or Explosive Limits	No Data Available	Oxidizing Properties	No Data Available	

## **SECTION 10 - STABILITY AND REACTIVITY**

**Stability:** Stable under recommended storage conditions.

Hazardous Decomposition Products/ Hazardous Polymerization: No Data Available.

Incompatibilities: Strong Oxidizing Agents.

## **SECTION 11 - TOXICOLOGICAL INFORMATION**

Acute Toxicity: No data available

Acute Toxicity: No data ava	Acute Toxicity: No data available.				
LD50 Oral (rat)	177 mg/kg (Acrylamide)				
Inhalation No data available					
LC50 Inhalation (rat)	4 h -> 1,500 mg/m3 (Acrylamide)				
Dermal	No data available.				
LD50 Dermal (rabbit)	1,141 mg/kg (Acrylamide)				
(OECD Test Guideline)					



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Oral: Category 4

**Dermal**: Based on available data, the classification criteria are not met **Inhalation**: Based on available data, the classification criteria are not met

Skin corrosion/irritation: Category 2

Skin – Rabbit (Acrylamide) Result: No skin irritation (OECD Test Guideline 405)

Serious eye damage/irritation: Category 2

Eyes – Rabbit (Acrylamide) Result: Irritating to eyes. (OECD Test Guideline 405)

## Respiratory or skin sensitization:

Maximization Test – Guinea pig (Acrylamide) May cause allergic skin reaction. (OECD Test Guideline 406)

Skin: Category 1 May cause sensitization by skin contact

Germ cell mutagenicity: Category 1B

May alter genetic material. In vivo tests showed mutagenic effects (Acrylamide)

Carcinogenicity; Category 1B

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC,

OSHA, ACGIH, NTP, or EPA classification. Possible human carcinogen (Acrylamide)
IARC: 2A - Group 2A: Probably carcinogenic to humans (Acrylamide)

NTP: RAHC - Reasonably anticipated to be a human carcinogen (Acrylamide)

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:**

Animal testing did not show any effects on fetal development. (Acrylamide) May cause reproductive disorders. Suspected human reproductive toxicant (Acrylamide)

## Specific target organ toxicity - single exposure

No data available (Acrylamide)

#### Specific target organ toxicity - repeated exposure

Oral – causes damage to organs through prolonged or repeated exposure. – Peripheral nervous system.

## **Aspiration hazard**

No data available (Acrylamide)

#### **Additional information**

RTECS: Not available.

Acrylamide toxicity is manifested as a sensorimotor peripheral neuropathy., Drowsiness, Loss of balance, Confusion.

Liver - Irregularities - Based on Human evidence

Liver - Irregularities - Based on Human evidence (Acrylamide)

## **SECTION 12 - ECOLOGICAL INFORMATION**

**Ecotoxicity effects:** 

Toxicity to fish	LC50 – Pimephales promelas (fathead minnow) – 90 mg/l – 96 h (Acrylamide)			
	NOEC - Cyprinus carpio (carp) - 5 mg/l - 28 d (Acrylamide)			
Toxicity to daphnia and other	Mortality NOEC – Daphnia magna (water flea) – 60 mg/l – 48 h (Acrylamide)			
aquatic invertebrates				



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Persistence and degradability:

Biodegradability	Bioconcentration factor (BCF): 1.65
Bioaccumulative potential:	
Bioaccumulation	Result: 100 % - Readily biodegradable. (OECD Test Guideline 301D)
	Oncorhynchus mykiss (rainbow trout) – 72 h - 710 μg/l (Acrylamide)

Mobility in soil: No data available (Acrylamide)

#### Results of PBT and vPvB assessment:

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### Other adverse effects:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

No data available

Chronic Toxicity: There are no known carcinogenic chemicals in this product

#### **SECTION 13 - DISPOSAL CONSIDERATIONS**

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

#### **SECTION 14 - TRANSPORT INFORMATION**

DOT	TDG	IATA	IMDG/IMO
UN number: 2074		UN Number: 2074	UN Number: 2074
Proper Shipping name: Acrylamide, solid	Not regulated	Proper Shipping name: Acrylamide, solid	Proper Shipping Name: Acrylamide,
Class: 6.1		Class: 6.1	Solid
Packing Group: III		Packing Group: III	<b>Class:</b> 6.1
Poison Inhalation			Packing Group: III
Hazard: No			EMS-No: F-A, S-A
V		V	V
Y		Y	<b>Y</b>

#### **SECTION 15 - REGULATORY INFORMATION**

## **USA Federal Regulation**

## SARA 302 Components:

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

## SARA 313 Components:

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



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Acrylamide CAS-No.: 79-06-1

#### **SARA 311/312 HAZARDOUS CATEGORIZATION:**

Acute Health Hazard, Chronic Health Hazard

Clean Water Act/ Clean Air Act: No Data Available

Clean Air Act: Not Applicable

TSCA 12(b)/ OSHA/ CERCLA: Not Applicable

**California Proposition 65:** 

Warning: This product contains a chemical known to the state of California to cause cancer.

Acrylamide (CAS-No: 79-06-1)

Warning: This product contains a chemical known to the state of California to cause birth defects or other

reproductive harm.

Acrylamide (CAS-No.: 79-06-1)

#### **STATE RIGHT TO KNOW**

Components	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Acrylamide	Listed	Listed	Listed	-	-
N,N'- Methylenediacrylamide	-	Listed	Listed	-	-

**HMIS Rating** 

Health hazard	Chronic Health Hazard	Flammability	Physical Hazard
2		1	1

**NFPA Rating** 

Health Hazard	Fire Hazard	Reactivity Hazard		
2	1	0		

## **US DEPARTMENT OF TRANSPORTATION**

REPORTABLE QUANTITY (RQ)	DOT MARINE POLLUTANT	DOT SEVER MARINE POLLUTANT
No	No	No

## **U.S. DEPARTMENT OF HOMELAND SECURITY:** This product does not contain any DHS chemicals.

**Canada:** 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.

This SDS complies with the requirements of Regulation (EC).

## **SECTION 16 - OTHER INFORMATION**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Boston BioProducts, Inc shall not be held liable for any damage resulting from handling or from contact with the above product. This product is sold for laboratory research and development purposes use only.

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