

# **SAFETY DATA SHEET**

[Required under safety and health regulations for shipping and handling]

Version: 2019  
Date Updated: October 22, 2019

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

**Product Name** Acryl/Bis solution (29: 1), 40% (w/v)  
**Product Code(s)** A0007  
**Recommended Use** For Laboratory Research Use Only  
 Not for Human or Animal Drug Use

**Supplier** Bio Basic Inc.  
**Address** 20 Konrad Crescent, Markham, Ontario,  
 Canada, L3R 8T4  
**Telephone** (905) 474 4493  
**Fax** (905) 474 5794  
**For Chemical Emergency Phone#** (416) 995 9730

**SECTION 2. ----- HAZARDS IDENTIFICATION -----**

**Classification of the substance or mixture**

**GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)**

- Acute toxicity, Oral (Category 4), H302
- Acute toxicity, Inhalation (Category 4), H332
- Skin irritation (Category 2), H315
- Eye irritation (Category 2A), H319
- Skin sensitisation (Category 1), H317
- Germ cell mutagenicity (Category 1B), H340
- Carcinogenicity (Category 1B), H350
- Reproductive toxicity (Category 2), H361
- Specific target organ toxicity - repeated exposure, Oral (Category 1), Peripheral nervous system, H372
- Short-term (acute) aquatic hazard (Category 3), H402

For the full text of the H-Statements mentioned in this Section, see Section 16.

**GHS Label elements, including precautionary statements**

Pictogram



Signal word

Danger

Hazard statement(s)

- |             |  |
|-------------|--|
| H302 + H332 | Harmful if swallowed or if inhaled   |
| H313        | May be harmful in contact with skin.   |
| H315        | Causes skin irritation.  |
| H317        | May cause an allergic skin reaction.   |
| H319        | Causes serious eye irritation.   |
| H340        | May cause genetic defects.   |
| H350        | May cause cancer.  |
| 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.   |

Precautionary 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/ vapours/ 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 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.

P302 + P352 IF ON SKIN: Wash with plenty of water.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician 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.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

**Hazards not otherwise classified (HNOC) or not covered by GHS - none**

**SECTION 3. - - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -**

Chemical Name	EC No.	CAS-No	Weight %
Acrylamide	201-173-7	79-06-1	30-50
N,N'-Methylenediacrylamide	203-750-9	110-26-9	0-10
Water	231-791-2	7732-18-5	30-50

**SECTION 4. - - - - - FIRST-AID MEASURES- - - - -**

**Description of first aid measures**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**

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

**If swallowed**

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 described in the labelling (see section 2) and/or in section 11

**Indication of any immediate medical attention and special treatment needed**

No data available

**SECTION 5. ----- FIRE FIGHTING MEASURES -----**

**Extinguishing media**

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture**

Carbon oxides, Nitrogen oxides (NOx), Ammonia Carbon oxides, Nitrogen oxides (NOx)

**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Further information**

No data available

**SECTION 6. ----- ACCIDENTAL RELEASE MEASURES-----**

**Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up**

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**Reference to other sections**

For disposal see section 13.

**SECTION 7. ----- HANDLING AND STORAGE-----**

**Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

**Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature 2 - 8 °C

Light sensitive.

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

**Components with workplace control parameters**

Components	CAS-No.	Value	Control parameters	Basis
Acrylamide	79-06-1	TWA	0.030000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks	Substance may be readily absorbed through intact skin			
		TWAEV	0.03 ppm	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

	A substance to which exposure must be reduced to a minimum in accordance with section 42 Skin (percutaneous) Carcinogenic effect suspected in humans			
		TWAEV	0.030000 ppm	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	A substance to which exposure must be reduced to a minimum in accordance with section 42 Skin (percutaneous) Carcinogenic effect suspected in humans			
		TWA	0.030000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
	Central Nervous System impairment Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption			
		TWA	0.030000 mg/m3	Canada. British Columbia OEL
	IARC '2A' applies to substances deemed probably carcinogenic to humans on the basis of limited evidence of carcinogenicity in humans. Contributes significantly to the overall exposure by the skin route. Vapour and aerosol.			
		TWAEV	0.030000 mg/m3	Canada. Ontario OELs
	Skin			
		TWA	0.030000 mg/m3	Canada. British Columbia OEL
	IARC '2A' applies to substances deemed probably carcinogenic to humans on the basis of limited evidence of carcinogenicity in humans. Contributes significantly to the overall exposure by the skin route. Vapour and aerosol.			
		TWA	0.030000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)

## Personal protective equipment

### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) 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 (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

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).

#### **Skin and body protection**

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.

#### **Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### **Specific engineering controls**

Use mechanical exhaust or laboratory fumehood to avoid exposure.

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

#### **Appearance**

Form	liquid
Colour	No data available

#### **Safety data**

pH	No data available
Melting point/freezing point	No data available
Boiling point	No data available
Flash point	No data available
Ignition temperature	No data available
Auto-ignition temperature	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	No data available
Density	No data available
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Relative vapour density	No data available
Odour	No data available
Odour Threshold	No data available
Evaporation rate	No data available

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

#### **Reactivity**

No data available

#### **Chemical stability**

Stable under recommended storage conditions.

#### **Possibility of hazardous reactions**

No data available

**Conditions to avoid**

No data available

**Incompatible materials**

Acids, Bases, Oxidizing agents, Reducing agents, Iron and iron salts., Copper, Aluminum, Brass, Free radical initiators

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Ammonia

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)

Other decomposition products - No data available In the event of fire: see section 5

**SECTION 11. ----- TOXICOLOGICAL INFORMATION -----****Acute toxicity****Oral LD50**

No data available

**Inhalation LC50**

No data available

**Dermal LD50**

No data available

**Other information on acute toxicity**

No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

Eyes: No data available

**Respiratory or skin sensitisation**

May cause sensitisation by skin contact.

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

IARC: 2A - Group 2A: Probably carcinogenic to humans (Acrylamide)

**Reproductive toxicity**

No data available

**Teratogenicity**

No data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

No data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

No data available

**Aspiration hazard**

No data available

**Potential health effects****Inhalation**

May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion**

Toxic if swallowed.

**Skin**

May cause skin irritation.

**Eyes**

May cause eye irritation.

**Signs and Symptoms of Exposure**

Acrylamide toxicity is manifested as a sensorimotor peripheral neuropathy.

**Synergistic effects**

No data available

**Additional Information**

RTECS: Not available

**SECTION 12. ----- ECOLOGICAL INFORMATION -----****Toxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**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.

**SECTION 13. ----- DISPOSAL CONSIDERATIONS -----****Product**

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. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14. ----- TRANSPORT INFORMATION -----****DOT (US)**

UN number: 3426 Class: 6.1 Packing group: III

Proper shipping name: Acrylamide solution

Reportable Quantity (RQ):

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG**

UN number: 3426 Class: 6.1 Packing group: III EMS-No: F-A, S-A

Proper shipping name: ACRYLAMIDE SOLUTION

Marine pollutant: No

**IATA**

UN number: 3426 Class: 6.1 Packing group: III

Proper shipping name: Acrylamide solution

**SECTION 15. ----- REGULATORY INFORMATION -----**

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

**SECTION 16. ----- OTHER INFORMATION-----**

Further information: no limited for paper copy, just for internal uses.  
For research use only. Not intended for human or animal diagnostic or therapeutic uses.

**Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**Issuing Date:** 22-Oct-2019

**End of SDS**