

# SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Identification

Product Name X-CLARITY™ Hydrogel Solution  
Product Number C13103

### Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, Manufacture of substances

### Manufacturer

Logos Biosystems, Inc.  
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### Supplier

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**Emergency telephone number +82 31 478 4185**

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

## 2. HAZARDS IDENTIFICATION

### **[GHS classification]**

#### **Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Eye Irrit. 2A H319 Causes serious eye irritation.

Muta. 1B H340 May cause genetic defects.

Carc. 1B H350 May cause cancer.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.

## Label elements

Labelling according Regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Danger

Hazard statements

- H302 + H332 – Harmful if swallowed or inhaled.
- 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 through prolonged or repeated exposure if swallowed.
- H402 – Harmful to aquatic life.

Precautionary statements

- P201 – Obtain special instructions before use. (H340) (H350) (H361)
- P202 – Do not handle until all safety precautions have been read and understood. (H340) (H350) (H361)
- P260 – Do not breathe dust/fume/gas/mist/vapors/spray. (H372) (H3317, H332 – P261: omitted b/c of P260)
- P264 – Wash skin thoroughly after handling. (H302) (H315) (H319) (H372)
- P270 – Do not eat, drink, or smoke when using this product. (H302) (H372)
- P271 – Use only outdoors or in a well-ventilated area. (H332)
- P272 – Contaminated work clothing should not be allowed out of the workplace. (H317)
- P273 – Avoid release to the environment. (H402)
- P280 – Wear protective gloves, eyewear, and clothing. (H315) (H319) (H340) (H350) (H361)
- P301 + P312 + P330 – IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell. (H302)
- P302 + P352 – IF ON SKIN: Wash with plenty of soap and water. (H315)
- P304 + P312 + P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician immediately if you feel unwell. (H332)
- P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. (H319)
- P308 + P313 – IF exposed or concerned: Get medical advice/attention. (H340) (H350) (H361) (H372 – P314: omitted b/c of P308 + P313 and other more specific precautionary statements)
- P332 + P313 – If skin irritation or rash occurs: Get medical advice/attention. (H315)
- P337 + P313 – If eye irritation persists: Get medical advice/attention. (H319)
- P362 + P364 – Take off contaminated clothing and wash before reuse. (H315)
- P405 – Store locked up. (H340) (H350) (H361)
- P501 – Dispose of contents/container to an approved waste disposal plant. (H302) (H340) (H350) (H361) (H372) (H402)

## Other hazards

None

## **3. COMPOSITION / INFORMATION ON INGREDIENTS**

### Mixtures

Synonyms	Formula	CAS No.	Weight %
Acrylamide	C <sub>3</sub> H <sub>5</sub> NO	79-06-1	3.5-5.5%
Sodium chloride	NaCl	7647-14-5	0.5-1%
Potassium chloride	KCl	7447-40-7	0.01-0.02%
Sodium hydrogen phosphate	NA <sub>2</sub> HPO <sub>4</sub>	7558-79-4	0.01-0.02%
Potassium dihydrogen phosphate	KH <sub>2</sub> PO <sub>4</sub>	7778-77-0	0.02-0.04%

#### 4. FIRST AID MEASURES

##### Description of first aid measures

In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Immediate medical attention is required
After inhalation	Move to fresh air. If not breathing, give artificial respiration. Call a physician or Poison Control Centre immediately
After swallowing	Induce vomiting and call for medical help.
Indication of any immediate medical attention and special treatment needed	No further relevant information available

#### 5. FIRE-FIGHTING MEASURES

##### Extinguishing media

###### **Suitable extinguishing media**

Use CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

##### Special hazards arising from the substances or mixture

Carbon oxides, nitrogen oxide

##### Advice of fire-fighters

###### **Protective equipment**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

##### Further information

No further relevant information available

#### 6. ACCIDENTAL RELEASE MEASURES

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

Avoid contact with skin, eyes and clothing. Use personal protective equipment

**Environmental precautions**

Do not allow to enter sewers/ surface or ground water.

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

Take up mechanically and collect in suitable container for disposal.  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

**Reference to other sections**

No further relevant information available

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

Always wear recommended Personal Protective Equipment (mask, glove).

**Conditions for safe storage, including any incompatibilities**

Keep away from sources of ignition, direct sunlight, and high temperature.

**Specific end use(s)**

No further relevant information available

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Control parameters**

Components with workplace control parameters

**Exposure controls**

**Appropriate engineering controls**

Avoid contact eyes, skin. Wash hands immediately after handling

**Personal protective equipment**

<b>Respiratory protection</b>	Hood
<b>Hand protection</b>	Protective gloves
<b>Eye protection</b>	Safety glasses
<b>Skin and Body protection</b>	Handle with Protective gloves and wear lab clothing
<b>Control of Environmental exposure</b>	Hood

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Appearance</b>	Form: liquid
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	No data available

pH	[7.6]
Melting point/freezing point	No data available
Initial boiling point and boiling range	100°C
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Specific Gravity/Relative density	No data available
Solubility	Fully miscible
Partition coefficient: n-octanol / water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Dynamic viscosity	No data available

## 10. STABILITY AND REACTIVITY

### Stability

**Stability**                      Stable under recommended storage conditions

### Possibility of hazardous reactions

No further relevant information available

### Conditions to avoid

No further relevant information available

### Incompatible materials

No further relevant information available

### Hazardous decomposition products

Carbon monoxide

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

Neuro toxic

### Skin corrosion/irritation

Irritant to skin and mucous membranes

### Serious eye damage/eye irritation

Irritant to eye

**Respiratory or skin sensitization**

2

**Germ cell mutagenicity**

1B

**Carcinogenicity**

1B

**Reproductive toxicity**

No further relevant information available

**Specific target organ toxicity – single exposure**

No further relevant information available

**Specific target organ toxicity – repeated exposure**

Peripheral nervous system

**Aspiration hazard**

No further relevant information available

**Potential health effects**

No further relevant information available

**Additional Information**

No further relevant information available

## **12. ECOLOGICAL INFORMATION**

**Toxicity**

No further relevant information available

**Persistence and degradability**

No further relevant information available

**Bioaccumulative potential**

No further relevant information available

**Mobility in soil**

No further relevant information available

**Results of PBT and vPvB assessment**

No data available

**Other adverse effects**

No further relevant information available

## **13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Product**

Hand over to hazardous waste disposer

**Contaminated packaging**

Accord to official regulations

## 14. TRANSPORT INFORMATION

### IMDG

UN number: 3426 Class: 6.1 Packing group: III, EMS Number: F-A, S-A  
Proper shipping name: ACRYLAMIDE, LIQUID  
Marine pollutant: No

### IATA

UN number: 3426 Class: 6.1 Packing group: III  
Proper shipping name: Acrylamide, Liquid

## 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### **Safety, health and environmental regulations/legislation specific for the substance or mixture**

Water hazard class: class 3, Substances of very high concern: acrylamide (79-06-1)

### **Chemical safety assessment**

A chemical safety assessment has not been carried out

## 16. OTHER INFORMATION

### **Further information**

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End of Safety Data Sheet