

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Liqui-Gel® 29:1
- **Article number:** 800803
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation** Research Use Only
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
MP Biomedicals Europe
Parc d'Innovation BP 50067
Rue Geiler de Kaysersberg
Illkirch Cedex 67402
France
tel: +33 3.88.67.54.25
www.mpbio.com
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:** :n° ORFILA" (01-45-42-59-59)

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

- Muta. 1B H340 May cause genetic defects.
- Carc. 1B H350 May cause cancer.
- Repr. 2 H361f Suspected of damaging fertility.
- STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.



GHS07

- Acute Tox. 4 H302 Harmful if swallowed.
- Acute Tox. 4 H312 Harmful in contact with skin.
- Skin Irrit. 2 H315 Causes skin irritation.
- Eye Irrit. 2 H319 Causes serious eye irritation.
- Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



T; Toxic

- R45-46-25-48/23/24/25: May cause cancer. May cause heritable genetic damage. Toxic if swallowed. Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.



Xn; Harmful

- R20/21-62: Harmful by inhalation and in contact with skin. Possible risk of impaired fertility.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.05.2013

Revision: 14.05.2013

Trade name: Liqui-Gel® 29:1

(Contd. of page 1)

**Xi; Irritant**

R36/38: Irritating to eyes and skin.

**Xi; Sensitising**

R43: May cause sensitisation by skin contact.

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· Label elements**· Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:**T Toxic****· Hazard-determining components of labelling:**

acrylamide prop-2-enamide

· Risk phrases:

45 May cause cancer.

46 May cause heritable genetic damage.

20/21 Also harmful by inhalation and in contact with skin.

25 Also toxic if swallowed.

36/38 Irritating to eyes and skin.

43 May cause sensitisation by skin contact.

48/23/24/25 Also toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

62 Possible risk of impaired fertility.

· Safety phrases:

53 Avoid exposure - obtain special instructions before use.

1/2 Keep locked up and out of the reach of children.

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

· Other hazards**· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.

EU

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.05.2013

Revision: 14.05.2013

Trade name: **Liqui-Gel® 29:1**

(Contd. of page 2)

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 79-06-1 EINECS: 201-173-7 Index number: 616-003-00-0	acrylamide prop-2-enamide ☠ T Carc. Cat. 2, Muta. Cat. 2 R45-46-25-48/23/24/25; ☠ Xn R20/21-62; ☠ Xi R36/38; ☠ Xi R43 Repr. Cat. 3 ----- ☠ Acute Tox. 3, H301; ☠ Muta. 1B, H340; Carc. 1B, H350; Repr. 2, H361f; STOT RE 1, H372; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	38,67%
CAS: 110-26-9 EINECS: 203-750-9	N,N'-methylene diacrylamide ☠ Xn R22 ----- ⚠ Acute Tox. 4, H302	1,33%

- **SVHC**

79-06-1	acrylamide prop-2-enamide
---------	---------------------------

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

EU

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.05.2013

Revision: 14.05.2013

Trade name: *Liqui-Gel® 29:1*

(Contd. of page 3)

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** *Not required.*
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** *Keep respiratory protective device available.*
- **Conditions for safe storage, including any incompatibilities**
- **Storage:** 2-8 °C
- **Requirements to be met by storerooms and receptacles:** *No special requirements.*
- **Information about storage in one common storage facility:** *Not required.*
- **Further information about storage conditions:**
Protect from exposure to the light.
Keep container tightly sealed.
- **Specific end use(s)** *No further relevant information available.*

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** *No further data; see item 7.*
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** *The lists valid during the making were used as basis.*
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.05.2013

Revision: 14.05.2013

Trade name: Liqui-Gel® 29:1

(Contd. of page 4)

- **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Fluid
Colour:	According to product specification
Odour:	Characteristic
Odour threshold:	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:**

Decomposition temperature: Not determined.

- **Self-igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**

Lower: Not determined.

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.05.2013

Revision: 14.05.2013

Trade name: *Liqui-Gel® 29:1*

(Contd. of page 5)

Upper:	<i>Not determined.</i>
· Vapour pressure at 20 °C:	23 hPa
· Density at 20 °C:	1,00854 g/cm ³
· Relative density	<i>Not determined.</i>
· Vapour density	<i>Not determined.</i>
· Evaporation rate	<i>Not determined.</i>
· Solubility in / Miscibility with water:	<i>Not miscible or difficult to mix.</i>
· Partition coefficient (n-octanol/water):	<i>Not determined.</i>
· Viscosity:	
Dynamic:	<i>Not determined.</i>
Kinematic:	<i>Not determined.</i>
· Solvent content:	
Organic solvents:	0,0 %
Water:	60,0 %
VOC (EC)	0,00 %
· Solids content:	40,0 %
· Other information	<i>No further relevant information available.</i>

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.*
- **Possibility of hazardous reactions** *No dangerous reactions known.*
- **Conditions to avoid** *No further relevant information available.*
- **Incompatible materials:** *No further relevant information available.*
- **Hazardous decomposition products:** *No dangerous decomposition products known.*

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

79-06-1 acrylamide prop-2-enamide

Oral	LD50	124 mg/kg (rat)
------	------	-----------------

Dermal	LD50	400 mg/kg (rat)
--------	------	-----------------

- **Primary irritant effect:**
- **on the skin:** *Irritant to skin and mucous membranes.*
- **on the eye:** *Irritating effect.*
- **Sensitization:** *Sensitization possible through skin contact.*
- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Toxic

Harmful

Irritant

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.05.2013

Revision: 14.05.2013

Trade name: Liqui-Gel® 29:1

(Contd. of page 6)

Carcinogenic.
The product can cause inheritable damage.


12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|-------------------------------------|---|
| · UN-Number | |
| · ADR, IMDG, IATA | UN2810 |
| · UN proper shipping name | |
| · ADR | 2810 TOXIC LIQUID, ORGANIC, N.O.S. (ACRYLAMIDE) |
| · IMDG, IATA | TOXIC LIQUID, ORGANIC, N.O.S. (ACRYLAMIDE) |
| · Transport hazard class(es) | |
| · ADR, IMDG, IATA | |
| |  |
| · Class | 6.1 Toxic substances. |
| · Label | 6.1 |
| · Packing group | |
| · ADR, IMDG, IATA | III |

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.05.2013

Revision: 14.05.2013

Trade name: **Liqui-Gel® 29:1**

(Contd. of page 7)

· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Toxic substances.
· Danger code (Kemler):	60
· EMS Number:	F-A,S-A
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
· Transport category	2
· Tunnel restriction code	E
· UN "Model Regulation":	UN2810, TOXIC LIQUID, ORGANIC, N.O.S. (ACRYLAMIDE), 6.1, III

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
 - **National regulations:**
 - **Information about limitation of use:**
Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.
 - **Other regulations, limitations and prohibitive regulations**
 - **Substances of very high concern (SVHC) according to REACH, Article 57**
- | | |
|---------|---------------------------|
| 79-06-1 | acrylamide prop-2-enamide |
|---------|---------------------------|
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
- | | |
|--------|---|
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H340 | May cause genetic defects. |
| H350 | May cause cancer. |
| H361f | Suspected of damaging fertility. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| R20/21 | Harmful by inhalation and in contact with skin. |
| R22 | Harmful if swallowed. |
| R25 | Toxic if swallowed. |

(Contd. on page 9)

EU

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.05.2013

Revision: 14.05.2013

Trade name: Liqui-Gel® 29:1

(Contd. of page 8)

- R36/38 *Irritating to eyes and skin.*
- R43 *May cause sensitisation by skin contact.*
- R45 *May cause cancer.*
- R46 *May cause heritable genetic damage.*
- R48/23/24/25 *Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.*
- R62 *Possible risk of impaired fertility.*

· **Department issuing MSDS:** Product safety department

· **Abbreviations and acronyms:**

ADR: *Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

IMDG: *International Maritime Code for Dangerous Goods*

IATA: *International Air Transport Association*

GHS: *Globally Harmonized System of Classification and Labelling of Chemicals*

VOC: *Volatile Organic Compounds (USA, EU)*

LC50: *Lethal concentration, 50 percent*

LD50: *Lethal dose, 50 percent*

EU