

L-Glutamine/Ammonia Assay Kit (Rapid)

Kit Safety Information Sheet

Date of issue: 05/06/2013

Revision date: 08/12/2017

Version: 1.3

SECTION 1: Kit identification 1.1. Kit identifier	
Product name Product code	: L-Glutamine/Ammonia Assay Kit (Rapid) : K-GLNAM
1.2. Details of the supplier of the KIT safe	ety information sheet
Megazyme Bray Business Park A98 YV29 Bray - Ireland T +353 12861220 - F +353 12861264 <u>cs@megazyme.com</u> - www.megazyme.com	

SECTION 2: General information

This product is a Kit which consists of several independently packaged components

This Kit should be handled in accordance with good laboratory practices and appropriate personal protective equipment should be used

SECTION 3: Kit contents

Name	General description	Quantity	Unit	Classification according to Regulation (EC) No. 1272/2008 [CLP]
L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 2)	Reagent	1	pcs (pieces)	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 1B, H360
L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 3)	Reagent	2	pcs (pieces)	Acute Tox. 4 (Oral), H302 Aquatic Chronic 3, H412
L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 4)	Reagent	2	pcs (pieces)	Eye Irrit. 2, H319 Repr. 2, H361 Lact., H362 Aquatic Chronic 3, H412
L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 5)	Reagent	1	pcs (pieces)	Eye Irrit. 2, H319 Repr. 2, H361 Lact., H362 Aquatic Chronic 3, H412

No substance or mixture included in the following Kit components is hazardous according to Regulation (EC) No. 1272/2008 [CLP] and therefore the requirements of Regulation (EU) 2015/830 do not apply

Name	General description	Quantity	Unit
L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 7)	Reagent	1	pcs (pieces)
L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 1)	Buffer	1	pcs (pieces)
L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 6)	Reagent	1	pcs (pieces)

SECTION 4: General advice

No data available	
SECTION 5: Safe handling advice	
Environmental precautions	: Avoid release to the environment
Storage conditions	: Store in a well-ventilated place. Keep cool.
Precautions for safe handling	Ensure good ventilation of the work station Wear personal protective equipment
SECTION 6: First aid measures	
First-aid measures after eye contact	: Rinse eyes with water as a precaution

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First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water
Other medical advice or treatment	: Treat symptomatically
SECTION 7: Fire fighting measures	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment Self-contained breathing apparatus Complete protective clothing
Hazardous decomposition products in case of fire	: Toxic fumes may be released
SECTION 8: Other information	
SECTION 8: Other Information	

No data available

Megazyme	L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 7) Safety Data Sheet according to Regulation (EU) 2015/830
	Date of issue: 05/06/2013 Revision date: 18/01/2018 Supersedes: 14/09/2016 Version: 1.3
SECTION 1: Identification of	f the substance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixture
Product name	: L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 7)
Product code	: K-GLNAM (Bottle 7)
1.2. Relevant identified uses of	of the substance or mixture and uses advised against
1.2.1. Relevant identified uses	
Main use category	: Professional use
Use of the substance/mixture	: Use as laboratory reagent
1.2.2. Uses advised against	
No additional information available	
1.3. Details of the supplier of the supplication of the supplicati	the safety data sheet
Megazyme Bray Business Park A98 YV29 Bray - Ireland T +353 12861220 - F +353 12861264 cs@megazyme.com - www.megazym	ne.com
1.4. Emergency telephone nur	
Emergency number	: +353 12861220 [9 am to 5 pm GMT - Monday to Friday]
	location .
SECTION 2: Hazards identifi	cation
SECTION 2: Hazards identifi 2.1. Classification of the subs	
	tance or mixture
2.1. Classification of the subs Classification according to Regular Not classified Adverse physicochemical, human	tance or mixture tion (EC) No. 1272/2008 [CLP]
2.1. Classification of the subs Classification according to Regulat Not classified Adverse physicochemical, human To our knowledge, this product does a	tance or mixture tion (EC) No. 1272/2008 [CLP] health and environmental effects
 2.1. Classification of the subs Classification according to Regulat Not classified Adverse physicochemical, human To our knowledge, this product does a practice. 2.2. Label elements 	tion (EC) No. 1272/2008 [CLP] health and environmental effects not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety
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 2.1. Classification of the subs Classification according to Regulat Not classified Adverse physicochemical, human I To our knowledge, this product does a practice. 2.2. Label elements Labelling according to Regulation I No labelling applicable Labelling according to: exemption No labelling required 2.3. Other hazards No additional information available 	tion (EC) No. 1272/2008 [CLP] health and environmental effects not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety (EC) No. 1272/2008 [CLP] for inner packaging where the contents do not exceed 10ml
 2.1. Classification of the subs Classification according to Regulat Not classified Adverse physicochemical, human I To our knowledge, this product does a practice. 2.2. Label elements Labelling according to Regulation (No labelling applicable Labelling according to: exemption No labelling required 2.3. Other hazards 	tion (EC) No. 1272/2008 [CLP] health and environmental effects not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety (EC) No. 1272/2008 [CLP] for inner packaging where the contents do not exceed 10ml
 2.1. Classification of the subs Classification according to Regulat Not classified Adverse physicochemical, human To our knowledge, this product does a practice. 2.2. Label elements Labelling according to Regulation of No labelling applicable Labelling according to: exemption No labelling required 2.3. Other hazards No additional information available SECTION 3: Composition/int 	tion (EC) No. 1272/2008 [CLP] health and environmental effects not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety (EC) No. 1272/2008 [CLP] for inner packaging where the contents do not exceed 10ml

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH annex II

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.

Safety Data Sheet

according to Regulation (EU) 2015/830	
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effe	cts, both acute and delayed
No additional information available	
4.3. Indication of any immediate medica	al attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam.
5.2. Special hazards arising from the su	ibstance or mixture
Hazardous decomposition products in case of	: Toxic fumes may be released.
fire	
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release mea	sures
6.1. Personal precautions, protective ed	uipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information
	refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containm	ent and cleaning up
Methods for cleaning up	: Mechanically recover the product.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
For further information refer to section 13.	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, include	ing any incompatibilities
Storage conditions	: Store in a well-ventilated place. Keep cool.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/pers	sonal protection
8.1. Control parameters	
No additional information available	
8.2. Exposure controls	
Appropriate engineering controls:	
Ensure good ventilation of the work station.	
Hand protection:	
Protective gloves	
U	

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)		2 (< 1.5)	EN 374

Eye protection:

Safety Data Sheet

according to Regulation (EU) 2015/830

Туре	Use	Characteristics	Standard
Safety glasses	Dust	With side shields	EN 166

Skin and body protection:

Wear suitable protective clothing

Туре	Standard
Lab coat	

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Dust mask	Туре Р1	Protection for Solid particles	EN 143, EN 149



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties				
9.1. Information on basic physical and chemical properties				
Physical state	: Solid			
Colour	: No data available			
Odour	: No data available			
Odour threshold	: No data available			
рН	: No data available			
Relative evaporation rate (butylacetate=1)	: No data available			
Melting point	: No data available			
Freezing point	: Not applicable			
Boiling point	: No data available			
Flash point	: Not applicable			
Auto-ignition temperature	: Not applicable			
Decomposition temperature	: No data available			
Flammability (solid, gas)	: Non flammable.			
Vapour pressure	: No data available			
Relative vapour density at 20 °C	: No data available			
Relative density	: Not applicable			
Solubility	: No data available			
Log Pow	: No data available			
Viscosity, kinematic	: Not applicable			
Viscosity, dynamic	: No data available			
Explosive properties	: No data available			
Oxidising properties	: No data available			
Explosive limits	: Not applicable			
9.2. Other information				

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

Safety Data Sheet

according to Regulation (EU) 2015/830

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological inform	ation
11.1. Information on toxicological effect	ts
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
SECTION 12: Ecological information	on
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified

Chronic aquatic toxicity	: Not classified

12.2.	2.2. Persistence and degradability				
No addi	itional information available				
12.3.	Bioaccumulative potential				
No addi	itional information available				
12.4.	Mobility in soil				
No addi	itional information available				
12.5.	Results of PBT and vPvB assessment				
No addi	itional information available				
12.6.	Other adverse effects				
No add	tional information available				
SECT	SECTION 13: Disposal considerations				

SECTION 13: Disposal consideration

13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN				
ADR	IATA			
14.1. UN number				
Not applicable	Not applicable			
14.2. UN proper shipping name				
Not applicable	Not applicable			
14.3. Transport hazard class(es)				
Not applicable	Not applicable			

Safety Data Sheet

according to Regulation (EU) 2015/830

ADR	IATA		
14.4. Packing group			
Not applicable	Not applicable		
14.5. Environmental hazards			
Not applicable	Not applicable		
No supplementary information available			

14.6. Special precautions for user

- Overland transport

Not applicable

- Air transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 6)

Safety Data Sheet

: Use as laboratory reagent

	according to Regulation (EU)	according to Regulation (EU) 2015/830				
	Date of issue: 05/06/2013	Revision date: 08/12/2017	Supersedes: 14/09/2016	Version: 1.3		
SECTION 1: Identification	on of the substance/mixtu	re and of the company/	/undertaking			
1.1. Product identifier						
Product form	: Mixture					
Product name	: L-Glutamine/A	: L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 6)				
Product code	: K-GLNAM (Bo	ottle 6)				
1.2. Relevant identified u	Relevant identified uses of the substance or mixture and uses advised against					
1.2.1. Relevant identified u	JSes					
Vain use category	: Professional u	ise				

Use of the substance/mixture

1.2.2. Uses advised against

No additional information available

Details of the supplier of the safety data sheet 1.3.

Manufacturer

Megazyme Bray Business Park A98 YV29 Bray - Ireland T +353 12861220 - F +353 12861264 cs@megazyme.com - www.megazyme.com

1.4. **Emergency telephone number**

Emergency number

: +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

SECTION 2: Hazards identification

Classification of the substance or mixture 2.1.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2.	Label elements	
Labelling	g according to Regulation (EC) No. 127	72/2008 [CLP]
EUH-state	tements	: EUH032 - Contact with acids liberates very toxic gas.

Labelling according to: exemption for inner packaging where the contents do not exceed 10ml

No labelling required

2.3. **Other hazards**

No additional information available

SEC	SECTION 3: Composition/information on ingredients			
3.1.	Substances			

Not applicable

3.2. **Mixtures**

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH annex II

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.

Safety Data Sheet

according to Regulation (EU) 2015/830	
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effe	cts, both acute and delayed
No additional information available	
4.3. Indication of any immediate medica	al attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Special hazards arising from the su	
Hazardous decomposition products in case of	: Toxic fumes may be released.
fire	
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release mea	
6.1. Personal precautions, protective ec	uipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containme	ent and cleaning up
Methods for cleaning up	: Take up liquid spill into absorbent material.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
For further information refer to section 13.	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, includi	ng any incompatibilities
Storage conditions	: Store in a well-ventilated place. Keep cool.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/pers	onal protection
8.1. Control parameters	
No additional information available	
8.2. Exposure controls	
Appropriate engineering controls:	
Ensure good ventilation of the work station.	
Hand protection:	
Protective gloves	
U	

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)		2 (< 1.5)	EN 374

Eye protection:

Safety glasses

Safety Data Sheet

according to Regulation (EU) 2015/830

Туре	Use	Characteristics	Standard
Safety glasses	Droplet	With side shields	EN 166

Skin and body protection:

Wear suitable protective clothing

Туре	Standard
Lab coat	

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Dust mask	Туре Р1	Protection for Liquid particles	EN 143, EN 149



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical	properties
9.1. Information on basic physical and	chemical properties
Physical state	: Liquid
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	:
9.2. Other information	
No additional information available	
SECTION 10: Stability and reactivit	у
10.1. Reactivity	
The product is non-reactive under normal cond	litions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Contact with acids liberates very toxic gas.

Safety Data Sheet

according to Regulation (EU) 2015/830

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Acids.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information	tion
11.1. Information on toxicological effects	3
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
SECTION 12: Ecological information	1
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified
12.2. Persistence and degradability	
No additional information available	

12.3. Bioaccumulative potential

No additional information available 12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN	
ADR	IATA
14.1. UN number	
Not applicable	Not applicable
14.2. UN proper shipping name	
Not applicable	Not applicable
14.3. Transport hazard class(es)	
Not applicable	Not applicable

Safety Data Sheet

according to Regulation (EU) 2015/830

ADR	ΙΑΤΑ
14.4. Packing group	
Not applicable	Not applicable
14.5. Environmental hazards	
Not applicable	Not applicable
No supplementary i	nformation available

14.6. Special precautions for user

- Overland transport

Not applicable

- Air transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:	
EUH032	Contact with acids liberates very toxic gas.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



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SECTION

1.1.

L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 5)

Safety Data Sheet

according to Regulation (EU) 2015/830

	Date of issue: 05/06/2013	Revision date: 11/12/2017	Supersedes: 14/09/2016	Version: 1.3	
V 1: Identification	of the substance/mixtur	re and of the company/	undertaking		I
Product identifier					
	Mixture				

Product form	: Mixture
Product name	: L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 5)
Product code	: K-GLNAM (Bottle 5)

1.2. Relevant identified uses of the substance or mixture and uses advised ag	ainst
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1.2.1. Relevant identified uses

Main use category	:	Professional use
Use of the substance/mixture	:	Use as laboratory reagent

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Megazyme Bray Business Park A98 YV29 Bray - Ireland T +353 12861220 - F +353 12861264 cs@megazyme.com - www.megazyme.com

1.4. Emergency telephone number

Emergency number

: +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

SECTION 2: Hazards identification 2.1. Classification of the substance or mixture

Classification according to	Regulation	(EC) No.	1272/2008 [CLP]

S S (
Serious eye damage/eye irritation, Category	H319
2	
Reproductive toxicity, Category 2	H361
Reproductive toxicity, Additional category,	H362
Effects on or via lactation	
Hazardous to the aquatic environment —	H412
Chronic Hazard, Category 3	
Full text of H statements : see section 16	

Adverse physicochemical, human health and environmental effects

May cause harm to breast-fed children. Suspected of damaging fertility or the unborn child. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) N Hazard pictograms (CLP)		
Signal word (CLP)	GHS07 GHS08 : Warning	
Hazardous ingredients	: lithium sulfate	
Hazard statements (CLP)	 H319 - Causes serious eye irritation H361 - Suspected of damaging fertility or the unborn child. H362 - May cause harm to breast-fed children. H412 - Harmful to aquatic life with long lasting effects. 	
Precautionary statements (CLP)	 P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P260 - Do not breathe mist, spray, vapours. P263 - Avoid contact during pregnancy and while nursing. P264 - Wash hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. 	
13/03/2018	EN (English)	13/42

Safety Data Sheet

according to Regulation (EU) 2015/830

EUH-statements	: EUH032 - Contact with acids liberates very toxic
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Labelling according to: exemption for inner packaging where the contents do not exceed 10ml

Hazard pictograms (CLP)



Hazardous ingredients

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
lithium sulfate	(CAS-No.) 10377-48-7 (EC-No.) 233-820-4	20 - 30	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Lact., H362 Repr. 2, H361 Aquatic Chronic 3, H412
sodium azide substance with a Community workplace exposure limit	(CAS-No.) 26628-22-8 (EC-No.) 247-852-1 (EC Index-No.) 011-004-00-7	< 0.1	Acute Tox. 2 (Oral), H300 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

gas.

Full text of H-statements: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effe	ects, both acute and delayed
Symptoms/effects after eye contact	: Eye irritation.
4.3. Indication of any immediate medicate	al attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Special hazards arising from the su	ubstance or mixture
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release mea	asures
6.1. Personal precautions, protective e	quipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. Do not breathe mist, spray, vapours. Avoid contact with skin and eyes.

Safety Data Sheet

according to Regulation (EU) 2015/830

•	S ()	
6.1.2.	For emergency responders e equipment	: Do not attempt to take action without suitable protective equipment. For further information
FIDIECIIV	e equipment	refer to section 8: "Exposure controls/personal protection".
6.2.	Environmental precautions	
Avoid rel	ease to the environment.	
6.3.	Methods and material for containment	t and cleaning up
Methods	for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other info	ormation	: Dispose of materials or solid residues at an authorized site.
6.4.	Reference to other sections	
For furthe	er information refer to section 13.	
SECTIO	ON 7: Handling and storage	
7.1.	Precautions for safe handling	
Precautio	ons for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Avoid contact during pregnancy/while nursing. Do not breathe mist, spray, vapours.
Hygiene	measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2.	Conditions for safe storage, including	g any incompatibilities
Storage of	conditions	: Store in a well-ventilated place. Keep cool. Store locked up.
7.3.	Specific end use(s)	
No additi	onal information available	
SECTIO	ON 8: Exposure controls/perso	nal protection

8.1. Control parameters	i	
sodium azide (26628-22-8)		
EU	Local name	Sodium azide
EU	IOELV TWA (mg/m ³)	0.1 mg/m³
EU	IOELV STEL (mg/m ³)	0.3 mg/m³
EU	Notes	Skin
EU	Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

8.2. **Exposure controls**

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)		2 (< 1.5)	EN 374

Eye protection:

Safety glasses

Туре	Use	Characteristics	Standard
Safety glasses	Droplet	With side shields	EN 166

Skin and body protection:

Wear suitable protective clothing

Туре	Standard
Lab coat	

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Device	Filter type	Condition	Standard
Dust mask	Туре Р1	Protection for Liquid particles	EN 143, EN 149
13/03/2018	EN (English)		15/42

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according to Regulation (EU) 2015/830



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemica	SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and			
Physical state	: Liquid		
Colour	No data available		
Odour	: No data available		
Odour threshold	: No data available		
pH	: No data available		
Relative evaporation rate (butylacetate=1)	: No data available		
Melting point	: Not applicable		
Freezing point	: No data available		
Boiling point	: No data available		
Flash point	: No data available		
Auto-ignition temperature	: No data available		
Decomposition temperature	: No data available		
Flammability (solid, gas)	: Not applicable		
Vapour pressure	: No data available		
Relative vapour density at 20 °C	: No data available		
Relative density Solubility	: No data available : No data available		
Log Pow	: No data available		
Viscosity, kinematic	: No data available		
Viscosity, dynamic	: No data available		
Explosive properties	: No data available		
Oxidising properties	: No data available		
Explosive limits	:		
9.2. Other information			
No additional information available			
SECTION 10: Stability and reactivity	tv		
10.1. Reactivity			
The product is non-reactive under normal cond	ditions of use, storage and transport.		
10.2. Chemical stability			
Stable under normal conditions.			
10.3. Possibility of hazardous reactions	8		
Contact with acids liberates very toxic gas.	-		
10.4. Conditions to avoid			
None under recommended storage and handli	ing conditions (see section 7).		
10.5. Incompatible materials	3 ()		
Acids.			
10.6. Hazardous decomposition produc			
Under normal conditions of storage and use, hazardous decomposition products should not be produced.			
SECTION 11: Toxicological inform			
11.1. Information on toxicological effect			
Acute toxicity (oral)	: Not classified		
Acute toxicity (dermal)	: Not classified : Not classified		
Acute toxicity (inhalation)	. NUL GASSIIICU		

Safety Data Sheet

according to Regulation (EU) 2015/830

lithium sulfate (10377-48-7)	
LD50 oral rat	580 mg/kg rat
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging fertility or the unborn child. May cause harm to breast-fed children.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological in	formation	
12.1. Toxicity		
Ecology - general	: Harmful to aquatic life with long lasting effects.	
Acute aquatic toxicity	: Not classified	
Chronic aquatic toxicity	: Harmful to aquatic life with long lasting effects.	

12.2. Persistence and degradability			
lithium sulfate (10377-48-7)			
Persistence and degradability	Biodegradability:Not applicable.		
Biochemical oxygen demand (BOD)	Not applicable		
Chemical oxygen demand (COD)	Not applicable		
ThOD	Not applicable		
BOD (% of ThOD)	Not applicable		
12.3. Bioaccumulative potential			
lithium sulfate (10377-48-7)			
Bioaccumulative potential	Not established.		
12.4. Mobility in soil			
No additional information available			
12.5. Results of PBT and vPvB assessm	nent		
No additional information available			
12.6. Other adverse effects			
No additional information available			
SECTION 13: Disposal consideration	ons		
13.1. Waste treatment methods			
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.		
SECTION 14: Transport information			
In accordance with ADR / RID / IMDG / IATA /	ADN		
ADR	ΙΑΤΑ		
14.1. UN number			
Not applicable	Not applicable		
14.2. UN proper shipping name			
Not applicable	Not applicable		

Safety Data Sheet

according to Regulation (EU) 2015/830

14.6. Special precautions for user

- Overland transport

Not applicable

- Air transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute toxicity (oral), Category 2	
Acute toxicity (oral), Category 4	
Hazardous to the aquatic environment — Acute Hazard, Category 1	
Hazardous to the aquatic environment — Chronic Hazard, Category 1	
Hazardous to the aquatic environment — Chronic Hazard, Category 3	
Serious eye damage/eye irritation, Category 2	
Reproductive toxicity, Additional category, Effects on or via lactation	
Reproductive toxicity, Category 2	
Fatal if swallowed.	
Harmful if swallowed.	
Causes serious eye irritation	
Suspected of damaging fertility or the unborn child.	
May cause harm to breast-fed children.	
Very toxic to aquatic life.	
Very toxic to aquatic life with long lasting effects.	
Harmful to aquatic life with long lasting effects.	
Contact with acids liberates very toxic gas.	

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



Safety Data Sheet

according to Regulation (EU) 2015/830

 Date of issue: 05/06/2013
 Revision date: 11/12/2017
 Supersedes: 14/09/2016
 Version: 1.3

SECTION 1: Identification of the	substance/mixture and of the company/undertaking		
1.1. Product identifier			
Product form	: Mixture		
Product name	: L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 4)		
Product code	: K-GLNAM (Bottle 4)		
1.2. Relevant identified uses of the s	substance or mixture and uses advised against		
1.2.1. Relevant identified uses			
Main use category	: Professional use		
Use of the substance/mixture	: Use as laboratory reagent		
1.2.2. Uses advised against			
No additional information available			
1.3. Details of the supplier of the sat	ety data sheet		
Manufacturer Megazyme Bray Business Park A98 YV29 Bray - Ireland T +353 12861220 - F +353 12861264 cs@megazyme.com - www.megazyme.com			
1.4. Emergency telephone number			
Emergency number	: +353 12861220 [9 am to 5 pm GMT - Monday to Friday]		
SECTION 2: Hazards identification	n		
2.1. Classification of the substance or mixture			
Classification according to Regulation (EC) No. 1272/2008 [CLP]			
Serious eye damage/eye irritation, Category 2	H319		
Reproductive toxicity, Category 2	H361		
Reproductive toxicity, Additional category,	H362		
Effects on or via lactation Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412		
Full text of H statements : see section 16			

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

May cause harm to breast-fed children. Suspected of damaging fertility or the unborn child. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. Hazard pictograms (CLP)	. 1272/2008 [CLP]	
Signal word (CLP)	: Warning	
Hazardous ingredients	: lithium sulfate	
Hazard statements (CLP)	 H319 - Causes serious eye irritation H361 - Suspected of damaging fertility or the unborn child. H362 - May cause harm to breast-fed children. H412 - Harmful to aquatic life with long lasting effects. 	
Precautionary statements (CLP)	 P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P260 - Do not breathe mist, spray, vapours. P263 - Avoid contact during pregnancy and while nursing. P264 - Wash hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. 	
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EUH-statements	 EUH208 - Contains Glutaminase, L-Glutamine amidohydrolase. May produce an allergic reaction. EUH032 - Contact with acids liberates very toxic gas.
Labelling according to: exemption	for inner packaging where the contents do not exceed 10ml
Hazard pictograms (CLP)	
Hazardous ingredients	GHS08 : lithium sulfate
2.3. Other hazards	

No additional information available

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
lithium sulfate	(CAS-No.) 10377-48-7 (EC-No.) 233-820-4	20 - 30	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Lact., H362 Repr. 2, H361 Aquatic Chronic 3, H412
Glutaminase, L-Glutamine amidohydrolase	(CAS-No.) 9001-47-2 (EC-No.) 618-332-5	0.1 - 1	Resp. Sens. 1, H334
sodium azide substance with a Community workplace exposure limit	(CAS-No.) 26628-22-8 (EC-No.) 247-852-1 (EC Index-No.) 011-004-00-7	< 0.1	Acute Tox. 2 (Oral), H300 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-statements: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effe	cts, both acute and delayed
Symptoms/effects after inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after eye contact	: Eye irritation.
4.3. Indication of any immediate medica	al attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
	. Water enroy Dry neuder Fear Carbon diavide
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Special hazards arising from the se	Ibstance or mixture
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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Safety Data Sheet

according to Regulation (EU) 2015/830

SECTION 6: Accidental	release measures			
6.1. Personal precautions, protective equipment and emergency procedures				
6.1.1. For non-emergency	personnel			
Emergency procedures	: Ventilate spillage area. I	: Ventilate spillage area. Do not breathe mist, spray, vapours. Avoid contact with skin and eyes.		
6.1.2. For emergency respo	onders			
Protective equipment		Do not attempt to take action without suitable protective equipment. For further information		
· · · · · · · · · · · · · · · · · · ·		sure controls/personal protection".		
6.2. Environmental preca	utions			
Avoid release to the environment	t.			
6.3. Methods and materia	al for containment and cleaning up			
Methods for cleaning up	• .	absorbent material. Notify authorities if product enters sewers or public		
. .	waters.			
Other information	: Dispose of materials or	solid residues at an authorized site.		
6.4. Reference to other set	ections			
For further information refer to se	ection 13.			
SECTION 7: Handling ar	nd storage			
7.1. Precautions for safe	handling			
Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipments special instructions before use. Do not handle until all safety precautions have understood. Avoid contact with skin and eyes. Avoid contact during pregnance Do not breathe mist, spray, vapours.		re use. Do not handle until all safety precautions have been read and uct with skin and eyes. Avoid contact during pregnancy/while nursing.		
Hygiene measures	Do not eat, drink or smo product.	: Do not eat, drink or smoke when using this product. Always wash hands after handling the		
7.2. Conditions for safe s	torage, including any incompatibilities			
Storage conditions	: Store in a well-ventilated	: Store in a well-ventilated place. Keep cool. Store locked up.		
7.3. Specific end use(s)	7.3. Specific end use(s)			
No additional information available				
SECTION 8: Exposure controls/personal protection				
8.1. Control parameters				
sodium azide (26628-22-8)				
EU	Local name	Sodium azide		
EU	IOELV TWA (mg/m ³)	0.1 mg/m ³		
EU	IOELV STEL (mg/m ³)	0.3 mg/m ³		
EU	Notes	Skin		

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Regulatory reference

Hand protection:

EU

Protective gloves

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)		2 (< 1.5)	EN 374

COMMISSION DIRECTIVE 2000/39/EC

Eye protection:

Safety glasses

Туре	Use	Characteristics	Standard
Safety glasses	Droplet	With side shields	EN 166

Skin and body protection:

Wear suitable protective clothing

Туре		Standard
Lab coat		
12/02/2018	EN (English)	21/42

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according to Regulation (EU) 2015/830

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Device	Filter type	Condition	Standard
Dust mask	Туре Р1	Protection for Liquid particles	EN 143, EN 149



Environmental exposure controls:

Avoid release to the environment.

Avoid release to the environment.	
SECTION 9: Physical and chemica	l properties
9.1. Information on basic physical and	I chemical properties
Physical state	: Liquid
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
рН	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	:
9.2. Other information	
No additional information available	
SECTION 10: Stability and reactivit	ty
10.1. Reactivity	
The product is non-reactive under normal cond	ditions of use, storage and transport.
10.2. Chemical stability	
Stable under normal conditions.	
10.3. Possibility of hazardous reactions	\$
Contact with acids liberates very toxic gas.	
10.4. Conditions to avoid	
None under recommended storage and handli	ng conditions (see section 7).
10.5. Incompatible materials	
Acids.	
10.6. Hazardous decomposition produc	xts
	nazardous decomposition products should not be produced.

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according to Regulation (EU) 2015/830

according to Regulation (EU) 2015/830	
SECTION 11: Toxicological informat	ion
11.1. Information on toxicological effects	
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
lithium sulfate (10377-48-7)	
LD50 oral rat	580 mg/kg rat
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging fertility or the unborn child. May cause harm to breast-fed children.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: Harmful to aquatic life with long lasting effects.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Harmful to aquatic life with long lasting effects.
12.2. Persistence and degradability	
lithium sulfate (10377-48-7)	
Persistence and degradability	Biodegradability:Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
12.3. Bioaccumulative potential	
lithium sulfate (10377-48-7)	
Bioaccumulative potential	Not established.
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessme	ent
No additional information available	
12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal consideration	ns
13.1. Waste treatment methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / IATA / A	DN
	ΙΔΤΔ

ADR	ΙΑΤΑ
14.1. UN number	
Not applicable	Not applicable
14.2. UN proper shipping name	
Not applicable	Not applicable
14.3. Transport hazard class(es)	
Not applicable	Not applicable

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according to Regulation (EU) 2015/830

ADR	IATA	
14.4. Packing group		
Not applicable	Not applicable	
14.5. Environmental hazards		
Not applicable	Not applicable	
No supplementary information available		

14.6. Special precautions for user

- Overland transport

Not applicable

- Air transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Lact.	Reproductive toxicity, Additional category, Effects on or via lactation
Repr. 2	Reproductive toxicity, Category 2
Resp. Sens. 1	Respiratory sensitisation, Category 1
H300	Fatal if swallowed.
H302	Harmful if swallowed.
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H361	Suspected of damaging fertility or the unborn child.
H362	May cause harm to breast-fed children.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH032	Contact with acids liberates very toxic gas.
EUH208	Contains . May produce an allergic reaction.
EUTIZUO	

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



Version: 1.3

Safety Data Sheet

3)

according to Regulation (EU) 2015/830

Date of issue: 05/06/2013 Revision date: 08/12/2017 Supersedes: 14/09/2016

SECTION 1: Identification of the substance/mixture and of the company/undertaking **Product identifier** 1.1. Product form : Mixture Product name : L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 3) Product code : K-GLNAM (Bottle 3) 12 Relevant identified uses of the substance or mixture and uses advised against 1.2.1. **Relevant identified uses** Main use category : Professional use Use of the substance/mixture : Use as laboratory reagent 1.2.2. Uses advised against No additional information available 1.3 Details of the supplier of the safety data sheet Manufacturer Megazyme Bray Business Park A98 YV29 Bray - Ireland T +353 12861220 - F +353 12861264 cs@megazyme.com - www.megazyme.com 1.4. **Emergency telephone number** Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday] SECTION 2: Hazards identification 2.1. **Classification of the substance or mixture** Classification according to Regulation (EC) No. 1272/2008 [CLP] Acute toxicity (oral), Category 4 H302 Hazardous to the aquatic environment ----H412 Chronic Hazard, Category 3 Full text of H statements : see section 16 Adverse physicochemical, human health and environmental effects Harmful if swallowed. Harmful to aquatic life with long lasting effects. 22 Label elements Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP) GHS07 Signal word (CLP) : Warning Hazardous ingredients : 3-cyclohexylaminopropane-1-sulphonic acid, CAPS buffer; sodium azide H302 - Harmful if swallowed. Hazard statements (CLP) H412 - Harmful to aquatic life with long lasting effects. Precautionary statements (CLP) P264 - Wash hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P273 - Avoid release to the environment. P301+P312 - IF SWALLOWED: Call a doctor, a POISON CENTER if you feel unwell. P330 - Rinse mouth. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. **EUH-statements** : EUH032 - Contact with acids liberates very toxic gas. Labelling according to: exemption for inner packaging where the contents do not exceed 10ml

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according to Regulation (EU) 2015/830

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
3-cyclohexylaminopropane-1-sulphonic acid, CAPS buffer	(CAS-No.) 1135-40-6 (EC-No.) 214-492-1	20 - 30	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312
sodium azide	(CAS-No.) 26628-22-8 (EC-No.) 247-852-1 (EC Index-No.) 011-004-00-7	0.1 - 1	Acute Tox. 2 (Oral), H300 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-statements: see section 16

4.1. Description of first aid measures	
First-aid measures general: Call a poison center or a doctor if you feel unwell.First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.First-aid measures after skin contact: Wash skin with plenty of water.First-aid measures after eye contact: Rinse eyes with water as a precaution.First-aid measures after ingestion: Call a poison center or a doctor if you feel unwell. Rinse mouth.	
4.2. Most important symptoms and effects, both acute and delayed	
No additional information available	
4.3. Indication of any immediate medical attention and special treatment needed	
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media : Water spray. Dry powder. Foam.	
5.2. Special hazards arising from the substance or mixture	
Hazardous decomposition products in case of : Toxic fumes may be released. fire	
5.3. Advice for firefighters	
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained brea apparatus. Complete protective clothing.	thing
SECTION 6: Accidental release measures	
6.1. Personal precautions, protective equipment and emergency procedures	
6.1.1. For non-emergency personnel	
Emergency procedures : Ventilate spillage area.	
6.1.2. For emergency responders Protective equipment : Do not attempt to take action without suitable protective equipment. For further informative refer to section 8: "Exposure controls/personal protection".	on
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containment and cleaning up	
Methods for cleaning up : Mechanically recover the product.	
Other information : Dispose of materials or solid residues at an authorized site.	
6.4. Reference to other sections	

Safety Data Sheet

according to Regulation (EU) 2015/830

SECTION 7: Handling and stor	age
7.1. Precautions for safe handling	
Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage,	including any incompatibilities
Storage conditions	: Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

sodium azide (26628-22-8)		
EU	Local name	Sodium azide
EU	IOELV TWA (mg/m ³)	0.1 mg/m ³
EU	IOELV STEL (mg/m ³)	0.3 mg/m ³
EU	Notes	Skin
EU	Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)		2 (< 1.5)	EN 374

Eye protection:

Safety glasses

Туре	Use	Characteristics	Standard
Safety glasses	Dust	With side shields	EN 166

Skin and body protection:

Wear suitable protective clothing

Туре	Standard
Lab coat	

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Dust mask	Туре Р1	Protection for Solid particles	EN 143, EN 149



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties		
Information on basic physical and chemical properties		
tate : Solid		
: No data available		
: No data available		
lr	Iformation on basic physical and chemical properties ate : Solid : No data available	

Safety Data Sheet

according to Regulation (EU) 2015/830

Odour threshold	: No data available
рН	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: Not applicable
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not applicable

9.2. Other information

No additional information available

SECTIO	N 10: Stability and reactivity		
10.1. R	Reactivity		
The produc	The product is non-reactive under normal conditions of use, storage and transport.		
10.2. C	Chemical stability		
Stable und	er normal conditions.		
10.3. P	Possibility of hazardous reactions		
Contact wit	h acids liberates very toxic gas.		
10.4. C	Conditions to avoid		
None unde	r recommended storage and handling conditions (see section 7).		
10.5. lı	ncompatible materials		
Acids.			
10.6. H	lazardous decomposition products		
Under norn	nal conditions of storage and use, hazardous decomposition products should not be produced.		
SECTIO	N 11: Toxicological information		
11.1. li	nformation on toxicological effects		

The information of toxicological effects	
Acute toxicity (oral)	: Oral: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
ATE CLP (oral)	526.6484095218 mg/kg bodyweight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

Safety Data Sheet

according to Regulation (EU) 2015/830

SECTION 12: Ecological informa	tion
12.1. Toxicity	
Ecology - general	: Harmful to aquatic life with long lasting effects. Harmful to aquatic life.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Harmful to aquatic life with long lasting effects.
12.2. Persistence and degradability	
No additional information available	
40.2 Discoursulative retential	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB asses	ssment
No additional information available	
12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal considera	ations
13.1. Waste treatment methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
SECTION 14: Transport informat	tion
In accordance with ADR / RID / IMDG / IAT.	A / ADN
ADR	ΙΑΤΑ
14.1. UN number	
Not applicable	Not applicable
14.2. UN proper shipping name	
Not applicable	Not applicable
14.3. Transport hazard class(es)	
Not applicable	Not applicable
14.4. Packing group	Net applicable
Not applicable	Not applicable
14.5.Environmental hazardsNot applicable	Not applicable
	No supplementary information available

14.6. Special precautions for user

- Overland transport

Not applicable

- Air transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. **EU-Regulations**

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety asses	ssment
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No chemical safety assessment has been carried out 13/03/2018

Safety Data Sheet

according to Regulation (EU) 2015/830

SECTION 16: Other information

Full text of H- and EUH-statements	:
Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
H300	Fatal if swallowed.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH032	Contact with acids liberates very toxic gas.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



1.1.

12

1.2.1.

L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle

Safety Data Sheet

2)

according to Regulation (EU) 2015/830 Date of issue: 05/06/2013 Revision date: 08/12/2017 Supersedes: 14/09/2016 Version: 1.3 SECTION 1: Identification of the substance/mixture and of the company/undertaking **Product identifier** Product form : Mixture Product name : L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 2) Product code : K-GLNAM (Bottle 2) Relevant identified uses of the substance or mixture and uses advised against **Relevant identified uses** Main use category : Professional use Use of the substance/mixture : Use as laboratory reagent

1.2.2. Uses advised against

No additional information available

1.3 Details of the supplier of the safety data sheet

Manufacturer

Megazyme Bray Business Park A98 YV29 Bray - Ireland T +353 12861220 - F +353 12861264 cs@megazyme.com - www.megazyme.com

1.4. **Emergency telephone number**

Emergency number

: +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

SECTION 2: Hazards identification 2.1. **Classification of the substance or mixture** Classification according to Regulation (EC) No. 1272/2008 [CLP] Skin corrosion/irritation, Category 2 H315 Serious eye damage/eye irritation, Category H319 Reproductive toxicity, Category 1B H360 Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

May damage fertility or the unborn child. Causes skin irritation. Causes serious eye irritation.

2.2. Label elements Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP) GHS07 GHS08 Signal word (CLP) : Danger Hazardous ingredients : imidazole Hazard statements (CLP) H315 - Causes skin irritation. H319 - Causes serious eye irritation H360 - May damage fertility or the unborn child. Precautionary statements (CLP) : P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P264 - Wash hands thoroughly after handling. P280 - Wear eye protection, protective clothing, protective gloves P302+P352 - IF ON SKIN: Wash with plenty of water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. **EUH-statements** : EUH032 - Contact with acids liberates very toxic gas.

Safety Data Sheet

according to Regulation (EU) 2015/830

Labelling according to: exemption for packages of a capacity of 125ml or less		
Hazard pictograms (CLP)	GHS07 GHS08	
Signal word (CLP)	: Danger	
Hazardous ingredients	: imidazole	
Hazard statements (CLP)	: H360 - May damage fertility or the unborn child.	
Precautionary statements (CLP)	 P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P280 - Wear protective gloves/protective clothing/eye protection/face protection P308+P313 - IF exposed or concerned: Get medical advice/attention. P405 - Store locked up. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. 	
EUH-statements	: EUH032 - Contact with acids liberates very toxic gas.	

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Triethanolamine substance with national workplace exposure limit(s) (IE)	(CAS-No.) 102-71-6 (EC-No.) 203-049-8 (REACH-no) 01-2119486482-31	5 - 10	Not classified
imidazole	(CAS-No.) 288-32-4 (EC-No.) 206-019-2 (EC Index-No.) 613-319-00-0	1 - 5	Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 Repr. 1B, H360D
sodium azide substance with a Community workplace exposure limit	(CAS-No.) 26628-22-8 (EC-No.) 247-852-1 (EC Index-No.) 011-004-00-7	< 0.1	Acute Tox. 2 (Oral), H300 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-statements: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effect	ts, both acute and delayed
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Eye irritation.
4.3. Indication of any immediate medical	attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.

Safety Data Sheet

according to Regulation (EU) 2015/830

5.2. Special hazards arising from the sul	bstance or mixture		
Hazardous decomposition products in case of fire	: Toxic fumes may be released.		
5.3. Advice for firefighters			
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.		
SECTION 6: Accidental release meas	sures		
6.1. Personal precautions, protective eq	uipment and emergency procedures		
6.1.1. For non-emergency personnel			
Emergency procedures	: Only qualified personnel equipped with suitable protective equipment may intervene.		
6.1.2. For emergency responders			
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".		
6.2. Environmental precautions			
Avoid release to the environment. Notify authorit	ies if product enters sewers or public waters.		
6.3. Methods and material for containme	ent and cleaning up		
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.		
Other information	: Dispose of materials or solid residues at an authorized site.		
6.4. Reference to other sections			
For further information refer to section 13.			
SECTION 7: Handling and storage			
7.1. Precautions for safe handling			
Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes.		
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse.		
7.2. Conditions for safe storage, including	ng any incompatibilities		
Storage conditions	: Store in a well-ventilated place. Keep cool. Store locked up.		
7.3. Specific end use(s)			
No additional information available			
SECTION 8: Exposure controls/personal protection			
8.1. Control parameters			

Triethanolamine (102-71-6)				
Ireland	Local name	Triethanolamine		
Ireland	OEL (8 hours ref) (mg/m³)	5 mg/m³		
sodium azide (26628-22-8)				
EU	Local name	Sodium azide		
EU	IOELV TWA (mg/m ³)	0.1 mg/m ³		
EU	IOELV STEL (mg/m ³)	0.3 mg/m ³		
EU	Notes	Skin		
EU	Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC		

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)		2 (< 1.5)	EN 374

Safety Data Sheet

according to Regulation (EU) 2015/830

Eye protection:

Safety glasses

Туре	Use	Characteristics	Standard
Safety glasses	Droplet	With side shields	EN 166

Skin and body protection:

Wear suitable protective clothing

Туре	Standard
Lab coat	

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Device	Filter type	Condition	Standard
Dust mask	Туре Р1	Protection for Liquid particles	EN 143, EN 149



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and	I chemical properties	
Physical state	: Liquid	
Colour	: No data available	
Odour	: No data available	
Odour threshold	: No data available	
рН	: No data available	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: Not applicable	
Freezing point	: No data available	
Boiling point	: No data available	
Flash point	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: Not applicable	
Vapour pressure	: No data available	
Relative vapour density at 20 °C	: No data available	
Relative density	: No data available	
Solubility	: No data available	
Log Pow	: No data available	
Viscosity, kinematic	: No data available	
Viscosity, dynamic	: No data available	
Explosive properties	: No data available	
Oxidising properties	: No data available	
Explosive limits	:	
9.2. Other information		
No additional information available		

SECTION 10: Stability and reactivity 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

Safety Data Sheet

according to Regulation (EU) 2015/830

10.3.	Possibility of hazardous reactions		
Contact	Contact with acids liberates very toxic gas.		
10.4.	Conditions to avoid		
None u	nder recommended storage and handling conditions (see section 7).		
10.5.	Incompatible materials		
Acids.			
10.6.	Hazardous decomposition products		
Under normal conditions of storage and use, hazardous decomposition products should not be produced.			

SECTION 11: Toxicological information		
11.1. Information on toxicological effects		
Acute toxicity (oral)	: Not classified	
Acute toxicity (dermal)	: Not classified	
Acute toxicity (inhalation)	: Not classified	
Triethanolamine (102-71-6)		
LD50 oral rat	> 5000 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; 6400 mg/kg bodyweight; Rat)	
LD50 oral	8000 mg/kg bodyweight	
LD50 dermal rat	> 5000 mg/kg (Rat)	
LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit)	
LD50 dermal	> 10000 mg/kg bodyweight	
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 1.8 mg/l	
Skin corrosion/irritation	: Causes skin irritation.	
Serious eye damage/irritation	: Causes serious eye irritation.	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: May damage fertility or the unborn child.	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	

SECTION 12: Ecological information				
12.1. Toxicity				
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.			
Acute aquatic toxicity	: Not classified			
Chronic aquatic toxicity	: Not classified			
Triethanolamine (102-71-6)				
LC50 fish 1	11800 mg/l			
LC50 fish 2	450 - 1000 mg/l (LC50; 96 h; Lepomis macrochirus)			
EC50 other aquatic organisms 1	2038 mg/l waterflea			
EC50 other aquatic organisms 2	216 mg/l			

12.2. Persistence and degradability

Triethanolamine (102-71-6)		
Persistence and degradability	Photolysis in the air. Readily biodegradable in water.	
Biochemical oxygen demand (BOD)	0.02 g O ₂ /g substance	
Chemical oxygen demand (COD)	1.5 g O ₂ /g substance	
ThOD	2.04 g O ₂ /g substance	
BOD (% of ThOD)	0.02 % ThOD	
12.3. Bioaccumulative potential		

Safety Data Sheet

according to Regulation (EU) 2015/830

Triethanolamine (102-71-6)				
BCF fish 1	< 3.9 (Cyprinus carpio; TEST DURATION: 6 WEEKS)			
Log Pow	-2.531.32			
Bioaccumulative potential	Bioaccumulation unlikely.			
12.4. Mobility in soil				
No additional information available				
12.5. Results of PBT and vPvB assessment				
No additional information available				
12.6. Other adverse effects				
No additional information available				
SECTION 13: Disposal considerations				
13.1. Waste treatment methods				
Waste treatment methods :	Dispose of contents/container in accordance with licensed collector's sorting instructions.			
SECTION 14: Transport information				
In accordance with ADR / RID / IMDG / IATA / ADN	l			
ADR	ΙΑΤΑ			
14.1. UN number				
Not applicable	Not applicable			
14.2. UN proper shipping name				
Not applicable	Not applicable			
14.3. Transport hazard class(es)				
Not applicable	Not applicable			
14.4. Packing group				
Not applicable	Not applicable			
14.5. Environmental hazards				
Not applicable	Not applicable Not applicable			
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Not applicable

- Air transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1	

Safety Data Sheet

according to Regulation (EU) 2015/830

Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1		
Repr. 1B	Reproductive toxicity, Category 1B		
Skin Corr. 1C	Skin corrosion/irritation, Category 1C		
H300	Fatal if swallowed.		
H302	Harmful if swallowed.		
H314	Causes severe skin burns and eye damage.		
H315	Causes skin irritation.		
H319	Causes serious eye irritation		
H360	May damage fertility or the unborn child.		
H360D	May damage the unborn child.		
H400	Very toxic to aquatic life.		
H410	Very toxic to aquatic life with long lasting effects.		
EUH032	Contact with acids liberates very toxic gas.		

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



Safety Data Sheet

according to Regulation (EU) 2015/830

	or the company/antion taking
1.1. Product identifier	
Product form	: Mixture
Product name	: L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 1)
Product code	: K-GLNAM (Bottle 1)
1.2. Relevant identified use	es of the substance or mixture and uses advised against
1.2.1. Relevant identified use	es
Main use category	: Professional use
Use of the substance/mixture	: Use as laboratory reagent
1.2.2. Uses advised against	
No additional information available	
	e • of the safety data sheet
	or the salety data sheet
Manufacturer Megazyme	
Bray Business Park	
A98 YV29 Bray - Ireland	
T +353 12861220 - F +353 12861	
cs@megazyme.com - www.mega	izyme.com
1.4. Emergency telephone	number
Emergency number	: +353 12861220 [9 am to 5 pm GMT - Monday to Friday]
SECTION 2: Hazards iden	ntification
2.1. Classification of the se	ubstance or mixture
Classification according to Reg	ulation (EC) No. 1272/2008 [CLP]
Not classified	
Adverse physicochemical hum	nan health and environmental effects
	bes not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety
practice.	ses not present any particular risk, provided it is nariuled in accordance with good occupational hygiene and salety
2.2. Label elements	
Labelling according to Regulati	ion (EC) No. 1272/2008 [CLP]
EUH-statements	: EUH032 - Contact with acids liberates very toxic gas.
	. LOTIUSZ - COTILACI WILLT ACIUS INDETALES VELY LOXIC YAS.
2.3. Other hazards	
2.3. Other hazards No additional information available	e
No additional information available	
No additional information available	e //information on ingredients
No additional information available SECTION 3: Composition 3.1. Substances	
No additional information available SECTION 3: Composition	

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH annex II

SECTION 4: First aid measures				
4.1. Description of first aid measures				
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.			
First-aid measures after skin contact : Wash skin with plenty of water.				
First-aid measures after eye contact	: Rinse eyes with water as a precaution.			
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.				
4.2. Most important symptoms and effects, both acute and delayed				
No additional information available				

Safety Data Sheet

according to Regulation (EU) 2015/830

4.3. Indication of an	y immediate medical attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefigh	ting measures
5.1. Extinguishing n	nedia
Suitable extinguishing med	ia : Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Special hazards	arising from the substance or mixture
Hazardous decomposition fire	products in case of : Toxic fumes may be released.
5.3. Advice for firefi	ghters
Protection during firefightin	g : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accider	ntal release measures
6.1. Personal preca	utions, protective equipment and emergency procedures
6.1.1. For non-emerge	ency personnel
Emergency procedures	: Ventilate spillage area.
6.1.2. For emergency	responders
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental	precautions
Avoid release to the enviro	nment.
6.3. Methods and m	aterial for containment and cleaning up
Methods for cleaning up	: Take up liquid spill into absorbent material.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to ot	her sections
For further information refe	r to section 13.
SECTION 7: Handlin	g and storage
7.1. Precautions for	safe handling
Precautions for safe handli Hygiene measures	ng : Ensure good ventilation of the work station. Wear personal protective equipment. : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for s	afe storage, including any incompatibilities
Storage conditions	: Store in a well-ventilated place. Keep cool.
7.3. Specific end us	e(s)
No additional information a	vailable
SECTION 8: Exposu	re controls/personal protection
8.1. Control parame	ters
No additional information a	vailable
8.2. Exposure contr	
Appropriate engineering	controls:
Ensure good ventilation of	the work station.
Hand protection:	
Protective gloves	

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)		2 (< 1.5)	EN 374

Eye protection:

Safety glasses

Туре	Use	Characteristics	Standard
Safety glasses	Droplet	With side shields	EN 166

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Skin and body protection:

Wear suitable protective clothing

Туре	Standard
Lab coat	

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Dust mask	Туре Р1	Protection for Liquid particles	EN 143, EN 149



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties				
9.1. Information on basic physical and chemical properties				
Physical state	: Liquid			
Colour	: No data available			
Odour	: No data available			
Odour threshold	: No data available			
рН	: No data available			
Relative evaporation rate (butylacetate=1)	: No data available			
Melting point	: Not applicable			
Freezing point	: No data available			
Boiling point	: No data available			
Flash point	: No data available			
Auto-ignition temperature	: No data available			
Decomposition temperature	: No data available			
Flammability (solid, gas)	: Not applicable			
Vapour pressure	: No data available			
Relative vapour density at 20 °C	: No data available			
Relative density	: No data available			
Solubility	: No data available			
Log Pow	: No data available			
Viscosity, kinematic	: No data available			
Viscosity, dynamic	: No data available			
Explosive properties	: No data available			
Oxidising properties	: No data available			
Explosive limits	:			
9.2. Other information				
No additional information available				
SECTION 10: Stability and reactivity				
	S			

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Contact with acids liberates very toxic gas.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

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10.5.	Incompatible materials		
Acids.			
10.6.	Hazardous decomposition products		
Under n	Under normal conditions of storage and use, hazardous decomposition products should not be produced.		

SECTION 11: Toxicological information	ation
11.1. Information on toxicological effec	ts
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological inform	nation
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified
12.2. Persistence and degradability	y .
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB ass	assmant
No additional information available	essment
12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal conside	rations
13.1. Waste treatment methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
SECTION 14: Transport informa	ation
In accordance with ADR / RID / IMDG / IA	ATA / ADN
ADR	ΙΑΤΑ
14.1. UN number	
Not applicable	Not applicable
14.2. UN proper shipping name	
Not applicable	Not applicable
14.3.Transport hazard class(es)Not applicable	Not applicable
14.4. Packing group Not applicable Image: Complexity of the second sec	Not applicable
	· · · · · · · · · · · · · · · · · · ·

Not applicable

Not applicable

14.5. Environmental hazards

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according to Regulation (EU) 2015/830

ADR	ΙΑΤΑ			
No supplementary information available				
14.6.	Special precautions for user			
- Overland	d transport			
Not applica	able			
- Air trans	port			
Not applica	able			
14.7.	Transport in bulk according to Annex II of Marpol and the IBC Code			
Not applica	able			
SECTIO	N 15: Regulatory information			
15.1. \$	Safety, health and environmental regulations/legislation specific for the substance or mixture			
15.1.1. I	EU-Regulations			
Contains n	no REACH substances with Annex XVII restrictions			
Contains n	no substance on the REACH candidate list			
Contains n	no REACH Annex XIV substances			
15.1.2. I	National regulations			
	nal information available			
15.2. (Chemical safety assessment			
No chemic	cal safety assessment has been carried out			
SECTIO	N 16: Other information			
Full text o	f H- and EUH-statements:			

Full text of H- and EOH-statements.		
EUH032	Contact with acids liberates very toxic gas.	

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.