

L-Asparagine/L-Glutamine/Ammonia Assay Kit

Kit SIS (Safety Information Sheet)

Issue date: 05/06/2013

Revision date: 22/04/2021

SECTION 1: Kit identification 1.1. Kit identifier	
Product name Product code	: L-Asparagine/L-Glutamine/Ammonia Assay Kit : K-ASNAM
1.2. Details of the supplier of the Kit safe	ty information sheet
Megazyme Bray Business Park A98 YV29 Bray - Ireland T +353 12861220 - F +353 12861264 <u>cs@megazyme.com</u> - <u>www.megazyme.com</u>	
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-Asparagine/L- Glutamine/Ammonia Assay Kit (Rapid) (Bottle 2)	Reagent	2	pcs (pieces)	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 1B, H360
L-Asparagine/L- Glutamine/Ammonia Assay Kit (Rapid) (Bottle 3)	Reagent	2	pcs (pieces)	Acute Tox. 4 (Oral), H302 Aquatic Chronic 3, H412
L-Asparagine/L- Glutamine/Ammonia Assay Kit (Rapid) (Bottle 4)	Reagent	1	pcs (pieces)	Eye Irrit. 2, H319
L-Asparagine/L- Glutamine/Ammonia Assay Kit (Rapid) (Bottle 5)	Reagent	1	pcs (pieces)	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
L-Asparagine/L- Glutamine/Ammonia Assay Kit (Rapid) (Bottle 6)	Reagent	1	pcs (pieces)	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Repr. 1B, H360

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-Asparagine/L- Glutamine/Ammonia Assay Kit (Rapid) (Bottle 1)	Buffer	1	pcs (pieces)
L-Asparagine/L- Glutamine/Ammonia Assay Kit (Rapid) (Bottle 7)	Reagent	1	pcs (pieces)
L-Asparagine/L- Glutamine/Ammonia Assay Kit (Rapid) (Bottle 8)	Reagent	1	pcs (pieces)

SECTION 4: General advice

No data available

SECTION 5: Safe handling advice

General measures

Environmental precautions

: Do not handle until all safety precautions have been read and understood.

: Avoid release to the environment

L-Asparagine/L-Glutamine/Ammonia Assay Kit

Kit SIS (Safety Information Sheet)

Storage conditions	: Store in a well-ventilated place. Keep cool. 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 First-aid measures after ingestion First-aid measures after inhalation First-aid measures after skin contact Other medical advice or treatment	 Rinse eyes with water as a precaution Call a poison center or a doctor if you feel unwell Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water 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	

No data available



Safety Data Sheet

according to Regulation (EU) 2015/830 Issue date: 05/06/2013 Revision date: 19/01/2018 Supersedes version of: 03/03/2017 Version: 1.3

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

1.1. Product identifier

Product form Product name Product code Mixture L-Asparagine/L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 8)

1.2. Relevant identified uses of the substance or mixture and uses advised against

:

:

1.2.1. Relevant identified uses

Industrial/Professional use spec Use of the substance/mixture

For professional use onlyUse as laboratory reagent

: K-ASNAM (Bottle 8)

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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]

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

No labelling applicable

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

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

Safety Data Sheet according to Regulation (EU) 2015/830

SECTION 4: First aid measures			
4.1. Description of first aid measures			
First-aid measures after inhalation First-aid measures after skin contact First-aid measures after eye contact First-aid measures after ingestion	 Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water. Rinse eyes with water as a precaution. 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			
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 subst	tance 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 measures		
6.1. Personal precautions, protective ed	quipment and emergency procedures	
6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders	: Ventilate spillage area.	
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	
Mathada far alganing un	· Mashanically recover the product	

Methods for cleaning up Other information	Mechanically recover the product.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 Hygiene measures	 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.

Safety Data Sheet

according to Regulation (EU) 2015/830

7.2. Conditions for safe storage, including any incompatibilities	es
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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

No additional information available

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 374-2

Eye protection:			
Safety glasses			
Туре	Use	Characteristics	Standard
Safety glasses	Dust	With side shields, clear	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	Type P1	Protection for Solid particles	EN 143, EN 149

Personal protective equipment symbol(s):



Environmental exposure controls: Avoid release to the environment.

Safety Data Sheet according to Regulation (EU) 2015/830

SECTION 9: Physical and chemical properties

Physical state	: Solid
Colour	: No data available on colour.
Odour	: None.
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	: Soluble in water.
Partition coefficient n-octanol/water (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	: 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.

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 i	nformation	
11.1. Information on toxicologic	al effects	
Acute toxicity (oral)	: Not classified	
Acute toxicity (dermal)	: Not classified	
Acute toxicity (inhalation)	: Not classified	

Safety Data Sheet according to Regulation (EU) 2015/830

Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity	:	Not classified Not classified Not classified 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	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: 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	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

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

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

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

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

No additional information available

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 Issue date: 05/06/2013 Revision date: 19/01/2018 Supersedes version of: 03/03/2017 Version: 1.3

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

:

:

1.1. Product identifier

Product form Product name Product code

Mixture L-Asparagine/L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 7) : K-ASNAM (Bottle 7)

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec Use of the substance/mixture

: For professional use only : 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

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]

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

EUH-statements

: 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

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

Safety Data Sheet according to Regulation (EU) 2015/830

4.1. Description of first aid measures		
First-aid measures after inhalation First-aid measures after skin contact First-aid measures after eye contact First-aid measures after ingestion	 Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water. Rinse eyes with water as a precaution. 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		
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.	
5.2. Special hazards arising from the substance 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 measures		
6.1. Personal precautions, protective e	quipment 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 containment and cleaning up		

Methods for cleaning up Other information	Take up liquid spill into absorbent material.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 Hygiene measures	 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.

Safety Data Sheet

according to Regulation (EU) 2015/830

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

No additional information available

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 374-2

Eye protection:			
Safety glasses			
Туре	Use	Characteristics	Standard
Safety glasses	Droplet	With side shields, clear	EN 166

Skin and body protection:	
Wear suitable protective clothing	
Туре	Standard
Lab coat	

Respiratory protection:			
In case of insufficient ventilation, we	ear suitable respiratory equipment		
Device	Filter type	Condition	Standard
Dust mask	Type P1	Protection for Liquid particles	EN 143, EN 149

Personal protective equipment symbol(s):



Environmental exposure controls: Avoid release to the environment.

Safety Data Sheet according to Regulation (EU) 2015/830

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: No data available on colour.
Odour	: None.
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	: Soluble in water.
Partition coefficient n-octanol/water (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.

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).

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	1
11.1. Information on toxicological effects	
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified Not classified Not classified

Safety Data Sheet according to Regulation (EU) 2015/830

Skin corrosion/irritation Serious eve damage/irritation	•	Not classified Not classified
Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity	:	Not classified Not classified Not classified
Reproductive toxicity	:	Not classified
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.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: 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	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

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

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

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

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.



Safety Data Sheet

according to Regulation (EU) 2015/830 Issue date: 05/06/2013 Revision date: 20/04/2021 Supersedes version of: 19/01/2018 Version: 1.4

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

1.1. Product identifier

Product form Product name Product code

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

: K-ASNAM (Bottle 6)

1.2. Relevant identified uses of the substance or mixture and uses advised against

:

1.2.1. Relevant identified uses

Industrial/Professional use spec Use of the substance/mixture

: For professional use only : 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

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. 1272/20	08 [CLP]
Acute toxicity (oral), Category 4	H302
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Respiratory sensitisation, Category 1	H334
Skin sensitisation, Category 1	H317
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. Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2	2008 [CLP]
Hazard pictograms (CLP)	
	GHS07 GHS08
Signal word (CLP)	: Danger
Contains	: Asparaginase; lithium sulfate; imidazole

Safety Data Sheet according to Regulation (EU) 2015/830

Hazard statements (CLP)	 H302 - Harmful if swallowed. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. 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. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P272 - Contaminated work clothing should not be allowed out of the workplace.
EUH-statements	: EUH032 - Contact with acids liberates very toxic gas.
Labelling according to: exemption for inner packaging	g where the contents do not exceed 10ml
Hazard pictograms (CLP)	: GHS08
Hazardous ingredients	: Asparaginase; lithium sulfate; imidazole
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
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
Asparaginase	(CAS-No.) 9015-68-3 (EC-No.) 232-765-3	1 – 5	Resp. Sens. 1, H334 Skin Sens. 1, H317 Repr. 2, H361
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. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

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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	: Rinse mouth. Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effects	, both acute and delayed
Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact	 May cause allergy or asthma symptoms or breathing difficulties if inhaled. Irritation. May cause an allergic skin reaction. 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.	
5.2. Special hazards arising from the substance 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 measures		
6.1. Personal precautions, protective equipment and emergency procedures		
6.1.1. For non-emergency personnel		
Emergency procedures	: Only qualified personnel equipped with suitable protective equipment may intervene. Avoid breathing dust/fume/gas/mist/vapours/spray.	
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 authorities if product enters sewers or public waters.

6.3. Methods and material for containment 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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.	

Safety Data Sheet

according to Regulation (EU) 2015/830

	Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. 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 locked up. 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 - Occupational Exposure Limits	
Local name	Sodium azide
IOELV TWA (mg/m³)	0.1 mg/m³
IOELV STEL (mg/m ³)	0.3 mg/m³
Notes	Skin
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 374-2

Eye protection:			
Safety glasses			
Туре	Use	Characteristics	Standard
Safety glasses	Droplet	With side shields, clear	EN 166

	Wear suitable protective clothing		
Type 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

Safety Data Sheet according to Regulation (EU) 2015/830

Personal protective equipment symbol(s):



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 on colour.
Odour	· None
0 0000	
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	: Soluble in water.
Partition coefficient n-octanol/water (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	: No data available
P	

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.

10.4. Conditions to avoid

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

10.5. Incompatible materials

No additional information available

Safety Data Sheet

according to Regulation (EU) 2015/830

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information	1	
11.1. Information on toxicological effects		
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Harmful if swallowed. Not classified Not classified 	
L-Asparagine/L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 6)		
ATE CLP (oral)	1974.67 mg/kg bodyweight	
lithium sulfate (10377-48-7)		
LD50 oral rat	580 mg/kg rat	
Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity	 Causes skin irritation. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Not classified 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.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified
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

Safety Data Sheet

according to Regulation (EU) 2015/830

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 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

ocorrow 14. mansport 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
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
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

Safety Data Sheet

according to Regulation (EU) 2015/830

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

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
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Sens. 1	Skin sensitisation, Category 1
H300	Fatal if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H360	May damage fertility or the unborn child.
H360D	May damage the unborn child.
H361	Suspected of damaging fertility or 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 Issue date: 05/06/2013 Revision date: 19/01/2018 Supersedes version of: 03/03/2017 Version: 1.3

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

1.1. Product identifier

Product form Product name Product code

- : Mixture : L-Asparagine/L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 5)
- : K-ASNAM (Bottle 5)

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec Use of the substance/mixture For professional use onlyUse as laboratory reagent

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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	on and a second s
2.1. Classification of the substance	or mixture
Classification according to Regulation (E	EC) No. 1272/2008 [CLP]
Acute toxicity (oral), Category 4	H302
Serious eye damage/eye irritation, Category Full text of H statements : see section 16	y 2 H319
Adverse physicochemical, human health	and environmental effects
Harmful if swallowed. Causes serious eye in	ritation.
2.2. Label elements	
Labelling according to Regulation (EC) N Hazard pictograms (CLP)	GHS07
Signal word (CLP) Contains	:Warning :lithium sulfate
Hazard statements (CLP)	 H302 - Harmful if swallowed. H319 - Causes serious eye irritation.
Precautionary statements (CLP)	 P264 - Wash hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P301+P312 - IF SWALLOWED: Call a doctor, a POISON CENTER if you feel unwell. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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EUH-statements

: EUH032 - Contact with acids liberates very toxic gas.

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

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	50 – 60	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
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 : 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 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 : Rinse mouth. Call a poison center or a doctor if you feel unwell. 4.2. Most important symptoms and effects, both acute and delayed 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.		
5.2. Special hazards arising from the substance 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.		

Safety Data Sheet according to Regulation (EU) 2015/830

SECTION 6: Accidental release measures		
6.1. Personal precautions, protectiv	e equipment and emergency procedures	
6.1.1. For non-emergency personnel Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes.	
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 contain	inment and cleaning up	
Methods for cleaning up Other information	Take up liquid spill into absorbent material.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 Hygiene measures	 Ensure good ventilation of the work station. Avoid contact with skin and eyes. 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 safe storage, in	ncluding 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 - Occupational Exposure Limits		
Local name	Sodium azide	
IOELV TWA (mg/m³)	0.1 mg/m³	
IOELV STEL (mg/m ³)	0.3 mg/m³	
Notes	Skin	
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

Safety Data Sheet according to Regulation (EU) 2015/830

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

Eye protection:				
Safety glasses				
Туре	Use	Characteristics	Standard	
Safety glasses	Droplet	With side shields, clear	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

Personal protective equipment symbol(s):



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 on colour.
Odour	: None.
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	: Soluble in water.
Partition coefficient n-octanol/water (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

Safety Data Sheet

according to Regulation (EU) 2015/830

Explosive limits

: No data available

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

Contact with acids liberates very toxic gas.

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	ation
11.1. Information on toxicological effect	ts
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Harmful if swallowed. Not classified Not classified
L-Asparagine/L-Glutamine/Ammonia As	ssay Kit (Rapid) (Bottle 5)
ATE CLP (oral)	1160 mg/kg bodyweight
lithium sulfate (10377-48-7)	
LD50 oral rat	580 mg/kg rat
Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity	 Not classified Causes serious eye irritation. Not classified Not classified 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 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. Hazardous to the aquatic environment, short-term : Not classified (acute) Hazardous to the aquatic environment, long-term : Not classified (chronic) 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 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	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
L	·

Safety Data Sheet

according to Regulation (EU) 2015/830

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

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

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
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H300	Fatal if swallowed.
H302	Harmful if swallowed.
H319	Causes serious eye irritation
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 Issue date: 05/06/2013 Revision date: 19/01/2018 Supersedes version of: 03/03/2017 Version: 1.3

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

1.1. Product identifier

Product form Product name Product code

- : Mixture : L-Asparagine/L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 4)
- 1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec Use of the substance/mixture

For professional use onlyUse as laboratory reagent

: K-ASNAM (Bottle 4)

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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]
Serious eye damage/eye irritation, Category 2 Full text of H statements : see section 16	H319
Adverse physicochemical, human health an	d environmental effects
Causes serious eye irritation.	
2.2. Label elements	
Labelling according to Regulation (EC) No.	1272/2008 [CLP]
Hazard pictograms (CLP)	GHS07
Signal word (CLP)	: Warning
Hazard statements (CLP)	: H319 - Causes serious eye irritation.
Precautionary statements (CLP)	 P264 - Wash hands thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention.
EUH-statements	 EUH032 - Contact with acids liberates very toxic gas. EUH208 - Contains Glutaminase, L-Glutamine amidohydrolase. May produce an allergic reaction. kaoing where the contents do not exceed 10ml

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

Safety Data Sheet according to Regulation (EU) 2015/830

No labelling required

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
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 after inhalation First-aid measures after skin contact First-aid measures after eye contact	 Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water. 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 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.	
5.2. Special hazards arising from the substance 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.	

Safety Data Sheet according to Regulation (EU) 2015/830

SECTION 6: Accidental release measures	
6.1. Personal precautions, protect	tive equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes.
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 cont	tainment and cleaning up
Methods for cleaning up Other information	Take up liquid spill into absorbent material.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 stor	age
7.1. Precautions for safe handling	
Precautions for safe handling	 Ensure good ventilation of the work station. Avoid contact with skin and eyes. 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, in	ncluding 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 - Occupational Exposure Limits	
Local name	Sodium azide
IOELV TWA (mg/m³)	0.1 mg/m³
IOELV STEL (mg/m ³)	0.3 mg/m³
Notes	Skin
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

Safety Data Sheet according to Regulation (EU) 2015/830

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

Eye protection:			
Safety glasses			
Туре	Use	Characteristics	Standard
Safety glasses	Droplet	With side shields, clear	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

Personal protective equipment symbol(s):



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 on colour.
Odour	: None.
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	: Soluble in water.
Partition coefficient n-octanol/water (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

Safety Data Sheet

according to Regulation (EU) 2015/830

Explosive limits

: No data available

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

Contact with acids liberates very toxic gas.

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		
11.1. Information on toxicological e	ffects	
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified Not classified Not classified 	
lithium sulfate (10377-48-7)		
LD50 oral rat	580 mg/kg rat	
Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity	 Not classified Causes serious eye irritation. Not classified Not classified Not classified Not classified 	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
SECTION 12: Ecological inform		

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.

Safety Data Sheet according to Regulation (EU) 2015/830

Hazardous to the aquatic environment, short-term	: Not classified
(acute)	
Hazardous to the aquatic environment, long-term	: Not classified
(chronic)	

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 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	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		
No supplementary information available			

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

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

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	
Eye Irrit. 2	Serious eye damage/eye irritation, 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.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
EUH032	Contact with acids liberates very toxic gas.	
EUH208	Contains Glutaminase, L-Glutamine amidohydrolase. May produce an allergic reaction.	

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 Issue date: 05/06/2013 Revision date: 06/03/2019 Supersedes version of: 19/01/2018 Version: 1.4

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

1.1. Product identifier

Product form Product name Product code : Mixture : L-Asparagine/L-Glut

- : L-Asparagine/L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 3)
- : K-ASNAM (Bottle 3)

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category Use of the substance/mixture Professional useUse 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 4H302Hazardous to the aquatic environment — Chronic Hazard, Category 3H412Full 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.

2.2. Label elements

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

Hazard pictograms (CLP)

Signal word (CLP) Contains Hazard statements (CLP)



- : 3-cyclohexylaminopropane-1-sulphonic acid, CAPS buffer; sodium azide : H302 - Harmful if swallowed.
 - H412 Harmful to aquatic life with long lasting effects.

Safety Data Sheet according to Regulation (EU) 2015/830

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 packagin	g where the contents do not exceed 10ml
Hazardous ingredients	: 3-cyclohexylaminopropane-1-sulphonic acid, CAPS buffer; sodium azide

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

SECTION 4: First aid measures	
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	: Rinse mouth. Call a poison center or a doctor if you feel unwell.

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measure	\$
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	fire : Toxic fumes may be released.

Safety Data Sheet

according to Regulation (EU) 2015/830

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	measures
6.1. Personal precautions, protect	ve 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 information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for cont	ainment and cleaning up

Methods for cleaning up Other information	Mechanically recover the product.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 sto	rage
7.1. Precautions for safe handling	g
Precautions for safe handling Hygiene measures	 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 safe storage, i	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 - Occupational Exposure Limits				
Local name	Sodium azide			
IOELV TWA (mg/m ³)	0.1 mg/m ³			
IOELV STEL (mg/m³)	0.3 mg/m ³			
Notes	Skin			
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC			

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Safety Data Sheet

according to Regulation (EU) 2015/830

	Hand protection:							
Disposable gloves Nitrile rubber (NBR) 3 (> 60 minutes) 2 (< 1.5) EN ISO 3 Eye protection: Safety glasses Type Use Characteristics Standard Safety glasses Dust clear, With side shields EN 174 Skin and body protection: Wear suitable protective clothing	Protective gloves							
Eye protection: Safety glasses Type Use Characteristics Standard Safety glasses Dust clear, With side shields EN 174 Skin and body protection: Wear suitable protective clothing	Туре	Material	Permeation	Thickness (mm)	Penetrati	on	Standard	
Safety glasses Characteristics Standard Type Use Characteristics Standard Safety glasses Dust clear, With side shields EN 174 Skin and body protection: Wear suitable protective clothing	Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)		2 (< 1.5)		EN ISO 374	
Safety glasses Dust clear, With side shields EN 174 Skin and body protection:								
Skin and body protection: Wear suitable protective clothing		Use		Characteristics	Characteristics		Standard	
Wear suitable protective clothing	Safety glasses	Dust		clear, With side shield	ds	EN 174		
	Туре		Standard	Standard				
Lab coat	Lab coat							
	Respiratory protection		le respiratory equipment					

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

Personal protective equipment symbol(s):



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	: None.
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	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available

Safety Data Sheet

according to Regulation (EU) 2015/830

Viscosity, kinematic	: No data available
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

Contact with acids liberates very toxic gas.

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			
11.1. Information on toxicological ef	11.1. Information on toxicological effects		
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Harmful if swallowed. Not classified Not classified 		
L-Asparagine/L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 3)			
ATE CLP (oral)	527.204 mg/kg bodyweight		
Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity	 Not classified Not classified Not classified Not classified Not classified 		
Reproductive toxicity	: Not classified		
STOT-single exposure	: Not classified		
STOT-repeated exposure	: Not classified		

Safety Data Sheet according to Regulation (EU) 2015/830

SECTION 12: Ecological information	
12.1. Toxicity	
Hazardous to the aquatic environment, short-term (acute)	 Harmful to aquatic life with long lasting effects. Harmful to aquatic life. Not classified Harmful to aquatic life with long lasting effects.
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 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		
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		
No supplementary information available			

14.6. Special precautions for user

Overland transport Not applicable Air transport Not applicable

Safety Data Sheet

according to Regulation (EU) 2015/830

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

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

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 (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.



Safety Data Sheet

according to Regulation (EU) 2015/830 Issue date: 05/06/2013 Revision date: 23/11/2017 Supersedes version of: 03/03/2017 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-Asparagine/L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 2) Product code K-ASNAM (Bottle 2) Type of product Mixture : Product group Trade product 1.2. Relevant identified uses of the substance or mixture and uses advised against 1.2.1. Relevant identified uses Industrial/Professional use spec : For professional use only 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 2	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)

Signal word (CLP)
Contains
Hazard statements (CLP)

GHS07 GHS08

: [Danger
-----	--------

- : imidazole
 - : H315 Causes skin irritation.
 - H319 Causes serious eye irritation.

H360 - May damage fertility or the unborn child.

Safety Data Sheet according to Regulation (EU) 2015/830

EUH-statements	 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 protective gloves/protective clothing/eye protection/face protection. 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. EUH032 - Contact with acids liberates very toxic gas.
Labelling according to: exemption for packages of a c	apacity 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.
	: 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/hearing protection.
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	: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest. Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTRE or doctor/physician.
First-aid measures after skin contact	: Immediately call a POISON CENTRE or doctor/physician. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.

Safety Data Sheet

according to Regulation (EU) 2015/830

First-aid measures after eye contact First-aid measures after ingestion	 Immediately call a POISON CENTRE or doctor/physician. 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. Do NOT induce vomiting. Immediately call a POISON CENTRE or doctor/physician. Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effects,	both acute and delayed
Symptoms/effects	: Causes severe skin burns and eye damage. Suspected of damaging fertility. May damage the unborn child.
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 Unsuitable extinguishing media	Sand. Water spray. Dry powder. Foam. Carbon dioxide.Do not use a heavy water stream.			
5.2. Special hazards arising from the substance or mixture				
Reactivity in case of fire Hazardous decomposition products in case of fire	Thermal decomposition generates : Corrosive vapours.Toxic fumes may be released.			
5.3. Advice for firefighters				
Firefighting instructions Protection during firefighting	 Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid fire-fighting water entering the environment. Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. 			

SECTION 6: Accidental release measures				
6.1. Personal precautions, protective equipment	nent and emergency procedures			
6.1.1. For non-emergency personnel				
Emergency procedures	: Evacuate unnecessary personnel. 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. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".			
Emergency procedures	: Ventilate area.			

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up				
Methods for cleaning up	Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. 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				

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

Safety Data Sheet

according to Regulation (EU) 2015/830

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling Hygiene measures	 Ensure good ventilation of the work station. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Wash Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work thoroughly after handling. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, including a	any incompatibilities
Technical measures Storage conditions Incompatible materials	 Comply with applicable regulations. Keep only in the original container in a cool, well ventilated place away from : Direct sunlight. Keep container closed when not in use. Store locked up. Store in a well-ventilated place. Keep cool. Sources of ignition. Direct sunlight.
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 - Occupational Exposure Limits Local name Triethanolamine OEL (8 hours ref) (mg/m³) 5 mg/m³

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

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

Avoid all unnecessary exposure.

Materials for protective clothing:

nitrile rubber

Safety Data Sheet

according to Regulation (EU) 2015/830

Hand protection:					
Wear protective gloves.					
Type Material Permeation Thickness (mm) Penetration Standard					Standard
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)	3	2 (< 1.5)	EN ISO 374

Eye protection:

Chemical goggles or face shield. Safety glasses			
Type Use Characteristics Standard			
Safety glasses	Droplet	With side shields	EN 166

Skin and body protection:	
Wear suitable protective clothing	

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. [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

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Physical state	: Liquid
Appearance	: Clear, colorless liquid.
Colour	: Colourless.
Odour	: characteristic.
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
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available

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Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates : Corrosive vapours.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established. Contact with acids liberates very toxic gas.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong bases. Acids.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. Thermal decomposition generates : Corrosive vapours.

SECTION 11: Toxicological inform	
11.1. Information on toxicological effe	ects
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified Not classified 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 Additional information Serious eye damage/irritation Additional information Respiratory or skin sensitisation Additional information Germ cell mutagenicity Additional information	 Causes skin irritation. Causes severe skin burns and eye damage. Causes serious eye irritation. Causes severe skin burns and eye damage. Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met

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Carcinogenicity Additional information	 Not classified Based on available data, the classification criteria are not met
Triethanolamine (102-71-6)	
IARC group	3 - Not classifiable
Reproductive toxicity Additional information	May damage fertility or the unborn child.Suspected of damaging fertility or the unborn child.
STOT-single exposure Additional information	 Not classified Based on available data, the classification criteria are not met
STOT-repeated exposure Additional information	 Not classified Based on available data, the classification criteria are not met
Aspiration hazard Additional information	Not classifiedBased on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

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.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: 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

L-Asparagine/L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 2)	
Persistence and degradability	Not established.

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

L-Asparagine/L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 2)	
Bioaccumulative potential	Not established.

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Triethanolamine (102-71-6)	
BCF fish 1	< 3.9 (Cyprinus carpio; TEST DURATION: 6 WEEKS)
Partition coefficient n-octanol/water (Log Pow)	-2.53 – -1.32
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

Additional information

: Avoid release to the environment.

SECTION 13: Disposal considerations	s
13.1. Waste treatment methods	
Waste treatment methods Product/Packaging disposal recommendations	 Dispose of contents/container in accordance with licensed collector's sorting instructions. Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	ΙΑΤΑ
14.1. UN number	·
Not regulated	Not regulated
14.2. UN proper shipping name	
Not regulated	Not regulated
14.3. Transport hazard class(es)	
Not regulated	Not regulated
14.4. Packing group	
Not regulated	Not regulated
14.5. Environmental hazards	
Not regulated	Not regulated
No supplementary information available	

14.6. Special precautions for user

Overland transport Not regulated Air transport Not regulated

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

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:	
Reference code	Applicable on
3.	Triethanolamine
3(b) L-Asparagine/L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 2)	

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

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

Indication of changes:	
Revision - See : *.	

Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16
	December 2008 on classification, labelling and packaging of substances and mixtures, amending and
	repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information	: None.

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	
Repr. 1B	Reproductive toxicity, Category 1B	
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-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.	

Safety Data Sheet according to Regulation (EU) 2015/830

Contact with acids liberates very toxic gas.

SDS EU (REACH Annex II)

EUH032

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 Issue date: 05/06/2013 Revision date: 19/01/2018 Supersedes version of: 03/03/2017 Version: 1.3

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

:

:

1.1. Product identifier

Product form Product name Product code

Mixture L-Asparagine/L-Glutamine/Ammonia Assay Kit (Rapid) (Bottle 1) : K-ASNAM (Bottle 1)

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec Use of the substance/mixture

: For professional use only : 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

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]

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

No labelling applicable

2.3. Other hazards

No additional information available

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

Safety Data Sheet according to Regulation (EU) 2015/830

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				
4.3. Indication of any immediate medical attention and special treatment needed				
Treat symptomatically.				

ocorrect of thronghang measures				
5.1. Extinguishing media				
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.			
5.2. Special hazards arising from the substance 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 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 information refer to section 8: "Exposure controls/personal protection".		
6.2. Environmental precautions			
Avoid release to the environment.			
6.3. Methods and material for containment	and cleaning up		

Methods for cleaning up Other information	Take up liquid spill into absorbent material.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 Hygiene measures	 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.

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7.2. Conditions for safe storage, including any incompatibilities	7.2.	Conditions	for safe storage	e, including any	v incompatibilities
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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

No additional information available

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 374-2

Eye protection:			
Safety glasses			
Туре	Use	Characteristics	Standard
Safety glasses	Droplet	With side shields, clear	EN 166

Skin and body protection:		
Wear suitable protective clothing		
Туре	Standard	
Lab coat		

Respiratory protection:			
In case of insufficient ventilation, we	ear suitable respiratory equipment		
Device	Filter type	Condition	Standard
Dust mask	Type P1	Protection for Liquid particles	EN 143, EN 149

Personal protective equipment symbol(s):



Environmental exposure controls: Avoid release to the environment.

Safety Data Sheet according to Regulation (EU) 2015/830

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: No data available on colour.
Odour	: None.
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	: Soluble in water.
Partition coefficient n-octanol/water (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.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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 information	on
11.1. Information on toxicological effects	
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified Not classified Not classified

Safety Data Sheet according to Regulation (EU) 2015/830

Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity	:	Not classified Not classified Not classified 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	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: 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	ΙΑΤΑ
14.1. UN number	
Not applicable	Not applicable
14.2. UN proper shipping name	
Not applicable	Not applicable

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

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

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

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

No additional information available

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.