

### Succinic Acid Assay Kit

Kit Safety Information Sheet

Date of issue: 03/09/2014

Revision date: 08/01/2018

Version: 1.3

SECTION 1: Kit identification	
1.1. Kit identifier	
	: Succinic Acid Assay Kit : K-SUCC
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 cs@megazyme.com - www.megazyme.com	

#### **SECTION 2: General information**

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

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

#### **SECTION 3: Kit contents**

Name	General description	Quantity	Unit	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Succinic Acid Assay Kit (Bottle 1)	Buffer	1	pcs (pieces)	Eye Irrit. 2, H319
Succinic Acid Assay Kit (Bottle 2)	Reagent	2	pcs (pieces)	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Aquatic Chronic 3, H412
Succinic Acid Assay Kit (Bottle 3)	Reagent	2	pcs (pieces)	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Succinic Acid Assay Kit (Bottle 6)	Reagent	1	pcs (pieces)	Eye Dam. 1, H318

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 descrip	tion Quantity	Unit
Succinic Acid Assay (Bottle 4)	Kit Reagent	1	pcs (pieces)
Succinic Acid Assay (Bottle 5)	Kit Reagent	1	pcs (pieces)

#### SECTION 4: General advice

#### No data available

SECTION 5: Safe handling advice	
Environmental precautions	: Avoid release to the environment
Storage conditions	: Store in a well-ventilated place. Keep cool.
Precautions for safe handling	: Ensure good ventilation of the work station Wear personal protective equipment
SECTION 6: First aid measures	
First-aid measures after eye contact	: Rinse eyes with water as a precaution
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water

# Succinic Acid Assay Kit

Kit Safety Information Sheet

Other medical advice or treatment	: Treat symptomatically
SECTION 7: Fire fighting measures	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment Self-contained breathing apparatus Complete protective clothing
Hazardous decomposition products in case of fire	: Toxic fumes may be released
SECTION 8: Other information	

No data available



Safety Data Sheet

according to Regulation (EU) 2015/830 Date of issue: 03/09/2014 Revision date: 08/01/2018

Supersedes: 20/03/2017

7 Version: 1.3

SECTION 1: Identification	of the substance/mixt	ure and of the <u>company</u>	/undertaking	
1.1. Product identifier				
Product form	: Mixture			
Product name	: Succinic Aci	d Assay Kit (Bottle 6)		
Product code	: K-SUCC (Bo	ottle 6)		
.2. Relevant identified use	s of the substance or mixtur	e and uses advised against		
I.2.1. Relevant identified use	5			
ndustrial/Professional use spec	: For profession	onal use only		
Jse of the substance/mixture	: Use as labor	•		
1.2.2. Uses advised against				
No additional information available				
1.3. Details of the supplier of	of the safety data sheet			
Vegazyme	,,			
Bray Business Park				
A98 YV29 Bray - Ireland T +353 12861220 - F +353 128612	64			
cs@megazyme.com - www.megaz				
I.4. Emergency telephone r				
Emergency number		220 [9 am to 5 pm GMT - Mond	ay to Fridavl	
			,	
SECTION 2: Hazards ident	ification			
2.1. Classification of the su	bstance or mixture			
Classification according to Regu	lation (EC) No. 1272/2008 [C	LP]		
Serious eye damage/eye irritation,		LP]		
Serious eye damage/eye irritation, 1 Full text of H statements : see secti	Category H318 on 16			
Serious eye damage/eye irritation, 1 Full text of H statements : see secti Adverse physicochemical, huma Causes serious eye damage.	Category H318 on 16			
Serious eye damage/eye irritation, 1 Full text of H statements : see secti Adverse physicochemical, huma Causes serious eye damage. 2.2. Label elements	Category H318 on 16 n health and environmental			
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Serious eye damage/eye irritation, Full text of H statements : see section Adverse physicochemical, huma Causes serious eye damage. 2.2. Label elements Labelling according to Regulation Hazard pictograms (CLP)	Category H318 on 16 n health and environmental n (EC) No. 1272/2008 [CLP] GHS05 CHS05 Danger	effects		
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Serious eye damage/eye irritation, Full text of H statements : see section Adverse physicochemical, huma Causes serious eye damage. 2.2. Label elements Labelling according to Regulation Hazard pictograms (CLP) Hazardous ingredients Hazard statements (CLP)	Category H318 on 16 n health and environmental n (EC) No. 1272/2008 [CLP] : GHS05 : Danger : Succinic acid : H318 - Caus : P280 - Wear	effects d, Butanedioic Acid, C4H6O4 ses serious eye damage. r eye protection, protective cloth		
Serious eye damage/eye irritation, Turner Serious eye damage/eye irritation, Full text of H statements : see section Adverse physicochemical, huma Causes serious eye damage. 2.2. Label elements Labelling according to Regulation Hazard pictograms (CLP) Hazardous ingredients Hazard statements (CLP)	Category H318 on 16 n health and environmental n (EC) No. 1272/2008 [CLP] GHS05 : Danger : Succinic acid : H318 - Caus : P280 - Wear P305+P351-	effects d, Butanedioic Acid, C4H6O4 ses serious eye damage. r eye protection, protective clott +P338 - IF IN EYES: Rinse cau	tiously with water for several m	ninutes. Remove
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No additional information available

Safety Data Sheet

according to Regulation (EU) 2015/830

### 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]
Succinic acid, Butanedioic Acid, C4H6O4	(CAS-No.) 110-15-6 (EC-No.) 203-740-4	100	Eye Dam. 1, H318

#### 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	: 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. Call a physician immediately.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effect	cts, both acute and delayed
Symptoms/effects after eye contact	: Serious damage to eyes.
4.3. Indication of any immediate medica	I attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Special hazards arising from the su	bstance or mixture
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release mea	sures
6.1. Personal precautions, protective eq	uipment and emergency procedures
6.1.1. For non-emergency personnel	
6.1.1. For non-emergency personnel Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes.
Emergency procedures	
Emergency procedures	
Emergency procedures 6.1.2. For emergency responders	<ul> <li>: Ventilate spillage area. Avoid contact with skin and eyes.</li> <li>: Do not attempt to take action without suitable protective equipment. For further information</li> </ul>
Emergency procedures 6.1.2. For emergency responders Protective equipment	<ul> <li>: Ventilate spillage area. Avoid contact with skin and eyes.</li> <li>: Do not attempt to take action without suitable protective equipment. For further information</li> </ul>
Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions	<ul> <li>Ventilate spillage area. Avoid contact with skin and eyes.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>
Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment.	<ul> <li>Ventilate spillage area. Avoid contact with skin and eyes.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>
Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for containment	<ul> <li>Ventilate spillage area. Avoid contact with skin and eyes.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>
Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for containment Methods for cleaning up	<ul> <li>Ventilate spillage area. Avoid contact with skin and eyes.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>
Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for containment Methods for cleaning up Other information	<ul> <li>Ventilate spillage area. Avoid contact with skin and eyes.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>
Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for containment Methods for cleaning up Other information 6.4. Reference to other sections	<ul> <li>Ventilate spillage area. Avoid contact with skin and eyes.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>
Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for containmed Methods for cleaning up Other information 6.4. Reference to other sections For further information refer to section 13.	<ul> <li>Ventilate spillage area. Avoid contact with skin and eyes.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>
Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for containing Methods for cleaning up Other information 6.4. Reference to other sections For further information refer to section 13. SECTION 7: Handling and storage	<ul> <li>Ventilate spillage area. Avoid contact with skin and eyes.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>
Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for containment Methods for cleaning up Other information 6.4. Reference to other sections For further information refer to section 13. SECTION 7: Handling and storage 7.1. Precautions for safe handling	<ul> <li>Ventilate spillage area. Avoid contact with skin and eyes.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> <li>ent and cleaning up <ul> <li>Mechanically recover the product. Take up liquid spill into absorbent material.</li> <li>Dispose of materials or solid residues at an authorized site.</li> </ul> </li> <li>Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact</li> </ul>

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according to Regulation (EU) 2015/830

7.2. Conditions for safe	e storage, including a	ny incompatibilities
--------------------------	------------------------	----------------------

Storage	e conditions	: Store in a well-ventilated place. Keep cool.
7.3.	Specific end use(s)	
No additional information available		
SECT	ION 8: Exposure controls/pe	ersonal 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	EN 166

#### Skin and body protection:

Wear suitable protective clothing

Туре	Standard
Lab coat	

#### **Respiratory protection:**

In case of insufficient ventilation, wear suitable respiratory equipment

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



#### Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties			
9.1. Information on basic physical and	chemical properties		
Physical state	: Solid		
Colour	: No data available 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	: 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.		

Safety Data Sheet

according to Regulation (EU) 2015/830

Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: Not applicable
Solubility	: Soluble in water.
Log Pow	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

#### 10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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.

<b>SECTION 11: Toxicological informat</b>	ion
11.1. Information on toxicological effects	
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information	n
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified
12.2. Persistence and degradability	
No additional information available	

Safety Data Sheet

according to Regulation (EU) 2015/830

### 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

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

#### 14.6. Special precautions for user

#### - Overland transport

Not applicable

#### - Air transport

Not applicable

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

Not applicable

#### **SECTION 15: Regulatory information**

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

#### 15.1.1. EU-Regulations

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

#### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

#### **SECTION 16: Other information**

#### Full text of H- and EUH-statements:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
H318	Causes serious eye damage.	

#### SDS EU (REACH Annex II)

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



Safety Data Sheet

according to Regulation (EU) 2015/830 Date of issue: 03/09/2014 Revision date: 08/01/2018

Supersedes: 20/03/2017 Version: 1.3 SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. **Product identifier** Product form : Mixture Product name : Succinic Acid Assay Kit (Bottle 5) Product code : K-SUCC (Bottle 5) 1.2. Relevant identified uses of the substance or mixture and uses advised against **Relevant identified uses** 1.2.1. 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 Details of the supplier of the safety data sheet 1.3. 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

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

Safety Data Sheet

according to Regulation (EU) 2015/830

4.3. Indication of any immediate medical attention and special treatment needed					
	Treat symptomatically.				
SECTION 5: Firefigh					
5.1. Extinguishing m					
Suitable extinguishing med	ia	: Water spray. Dry pow	der. Foam. Carbon dioxi	de.	
5.2. Special hazards	arising from the sub	stance or mixture			
Hazardous decomposition fire	products in case of	: Toxic fumes may be r	eleased.		
5.3. Advice for firefig	ghters				
Protection during firefighting	g	: Do not attempt to take apparatus. Complete		protective equipment. Sel	f-contained breathing
<b>SECTION 6: Acciden</b>	ntal release meas	ures			
6.1. Personal precau	utions, protective equ	ipment and emergency	procedures		
6.1.1. For non-emerge	ency personnel				
Emergency procedures		: Ventilate spillage area	a.		
6.1.2. For emergency	responders				
Protective equipment			e action without suitable p posure controls/personal	protective equipment. For protection".	further information
6.2. Environmental p	orecautions				
Avoid release to the environ	nment.				
6.3. Methods and ma	aterial for containme	nt and cleaning up			
Methods for cleaning up		: Take up liquid spill int			
Other information		: Dispose of materials of	or solid residues at an au	thorized site.	
6.4. Reference to oth					
For further information refe					
SECTION 7: Handlin	g and storage				
7.1. Precautions for	•				
Precautions for safe handlin	ng	-		ear personal protective e	• •
Hygiene measures		: Do not eat, drink or sr product.	noke when using this pro	duct. Always wash hands	s after handling the
	afe storage, includin	g any incompatibilities			
Storage conditions		: Store in a well-ventila	ted place. Keep cool.		
7.3. Specific end use	e(s)				
No additional information a	vailable				
<b>SECTION 8: Exposu</b>	re controls/perso	onal protection			
8.1. Control paramet					
No additional information a	vailable				
8.2. Exposure control	ols				
Appropriate engineering					
Ensure good ventilation of the work station.					
Hand protection:					
Protective gloves					
_	aterial	Permeation	Thickness (mm)	Penetration	Standard

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	EN 166

Safety Data Sheet

according to Regulation (EU) 2015/830

#### Skin and body protection:

Wear suitable protective clothing

Туре	Standard
Lab coat	

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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



#### Environmental exposure controls:

Avoid release to the environment.

<b>SECTION 9: Physical and chemical</b>	l 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.			
Log Pow	: No data available			
Viscosity, kinematic	: No data available			
Viscosity, dynamic	: No data available			
Explosive properties	: No data available			
Oxidising properties	: No data available			
Explosive limits	:			
9.2. Other information				
No additional information available				
SECTION 10: Stability and reactivit	V			

SECH	ON TO: Stability and reactivity
10.1.	Reactivity
The proc	duct is non-reactive under normal conditions of use, storage and transport.
10.2.	Chemical stability
Stable u	nder 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).

Safety Data Sheet

according to Regulation (EU) 2015/830

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 inf	ormation
11.1. Info	ormation on toxicological	effects
Acute toxicity	(oral)	: Not classified
Acute toxicity	(dermal)	: Not classified
Acute toxicity	(inhalation)	: Not classified
Skin corrosior	n/irritation	: Not classified
Serious eye d	amage/irritation	: Not classified
Respiratory o	r skin sensitisation	: Not classified
Germ cell mu	tagenicity	: Not classified
Carcinogenici	ty	: Not classified
Reproductive	toxicity	: Not classified
STOT-single	exposure	: Not classified
STOT-repeate	ed exposure	: Not classified
Aspiration haz	zard	: Not classified

SECTION 12: Ecological information	n
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessm	ent
No additional information available	
12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal consideration	ns
13.1. Waste treatment methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
<b>SECTION 14: Transport information</b>	
In accordance with ADR / RID / IMDG / IATA / A	ADN
ADR	IATA
14.1. UN number	
Not applicable	Not applicable
14.2. UN proper shipping name Not applicable	Not applicable
14.3. Transport hazard class(es)	
Net employed	Neterryliceble

Not applicable

Not applicable

Not applicable

**Environmental hazards** 

Packing group

Not applicable

Not applicable **14.5.** Envi

Not applicable

Safety Data Sheet

according to Regulation (EU) 2015/830

ADR	ΙΑΤΑ
	No supplementary information available
14.6.	Special precautions for user
- Overla	and transport
Not app	blicable
- Air tra	ansport
Not app	blicable
14.7.	Transport in bulk according to Annex II of Marpol and the IBC Code
Not app	olicable
SECT	ION 15: Regulatory information
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
15.1.1.	EU-Regulations
Contain	ns no REACH substances with Annex XVII restrictions
Contain	ns no substance on the REACH candidate list
Contain	ns no REACH Annex XIV substances
15.1.2.	National regulations
No addi	itional information available
15.2.	Chemical safety assessment
No cher	mical safety assessment has been carried out
SECT	TON 16: Other information
	xt of H- and EUH-statements:

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.



# Succinic Acid Assay Kit (Bottle 4) Safety Data Sheet

according to Regulation (EU) 2015/830

Megazyme	Date of issue: 03/09/2014	Revision date: 08/01/2018	Supersedes: 20/03/2017	Version: 1.3
SECTION 1: Identification of t	the substance/mixtu	re and of the company	/undertaking	
1.1. Product identifier				
Product form	: Mixture			
Product name	: Succinic Acid	Assay Kit (Bottle 4)		
Product code	: K-SUCC (Bot	tle 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	: For profession	nal use only		
Use of the substance/mixture	: Use as labora	tory reagent		
1.2.2. Uses advised against				
No additional information available				
1.3. Details of the supplier of th	e safety data sheet			
Megazyme Bray Business Park A98 YV29 Bray - Ireland T +353 12861220 - F +353 12861264 <u>cs@megazyme.com</u> - <u>www.megazyme</u>	<u>.com</u>			
1.4. Emergency telephone num	ber			
Emergency number		20 [9 am to 5 pm GMT - Monda	ay to Friday]	
SECTION 2: Hazards identific 2.1. Classification of the substa				
Adverse physicochemical, human he To our knowledge, this product does no practice.			ordance with good occupatior	al hygiene and safe
2.2. Label elements				
Labelling according to Regulation (E EUH-statements Labelling according to: exemption fo	: EUH032 - Co	ntact with acids liberates very t the contents do not exceed	-	
No labelling required				
2.3. Other hazards				
No additional information available				
SECTION 3: Composition/info	ormation on ingredie	ents		
3.1. Substances				
Not applicable				
3.2. Mixtures				
This mixture does not contain any subs	tances to be mentioned ac	cording to the criteria of section	n 3.2 of REACH annex II	
SECTION 4: First aid measure	25			

SECTION 4. First did medsures	
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 eff	ects, both acute and delayed
No additional information available	

Safety Data Sheet

according to Regulation (EU) 2015/830

0 0 (	,				
4.3. Indication of	any immediate medica	l attention and special t	reatment needed		
Treat symptomatically.					
SECTION 5: Firef					
5.1. Extinguishir	-				
Suitable extinguishing r			vder. Foam. Carbon diox	ide.	
	rds arising from the su				
Hazardous decomposit fire	ion products in case of	: Toxic fumes may be	released.		
5.3. Advice for fi	refighters				
Protection during firefig	hting	: Do not attempt to tak apparatus. Complete		protective equipment. Se	lf-contained breathing
<b>SECTION 6: Acci</b>	dental release mea	sures			
6.1. Personal pre	ecautions, protective eq	uipment and emergenc	y procedures		
6.1.1. For non-eme	ergency personnel				
Emergency procedures	i	: Ventilate spillage are	a.		
6.1.2. For emerger	ncy responders				
Protective equipment			e action without suitable posure controls/persona	protective equipment. Fo I protection".	r further information
6.2. Environmen	tal precautions				
Avoid release to the en	vironment.				
6.3. Methods and	d material for containme	ent and cleaning up			
Methods for cleaning u	p	: Take up liquid spill in	to absorbent material.		
Other information		: Dispose of materials	or solid residues at an au	uthorized site.	
	o other sections				
For further information					
SECTION 7: Hand					
	for safe handling				
Precautions for safe ha	ndling	•		/ear personal protective e	
Hygiene measures		product.	moke when using this pr	oduct. Always wash hand	is after handling the
7.2. Conditions f	or safe storage, includi	ng any incompatibilities	i		
Storage conditions		: Store in a well-ventila			
7.3. Specific end	use(s)				
No additional information					
SECTION 8: Expo	sure controls/pers	onal protection			
8.1. Control para					
No additional information	on available				
8.2. Exposure co	ontrols				
Appropriate engineer	ing controls:				
Ensure good ventilation	-				
Hand protection:					
Protective gloves					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard

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	EN 166

Safety Data Sheet

according to Regulation (EU) 2015/830

#### Skin and body protection:

Wear suitable protective clothing

Туре	Standard
Lab coat	

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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



#### Environmental exposure controls:

Avoid release to the environment.

<b>SECTION 9: Physical and chemical</b>	properties
9.1. Information on basic physical and	
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.
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	

SECTI	SECTION 10: Stability and reactivity				
10.1.	Reactivity				
The proc	The product is non-reactive under normal conditions of use, storage and transport.				
10.2.	Chemical stability				
Stable u	nder 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).

Safety Data Sheet

according to Regulation (EU) 2015/830

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: Toxicologi	cal information
11.1. Information on toxico	logical effects
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

<b>SECTION 12: Ecological information</b>	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessme	nt
No additional information available	
12.6. Other adverse effects	
No additional information available	
<b>SECTION 13: Disposal consideration</b>	15
13.1. Waste treatment methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
<b>SECTION 14: Transport information</b>	
In accordance with ADR / RID / IMDG / IATA / A	DN
ADR	ΙΑΤΑ
14.1. UN number	
Not applicable	Not applicable
14.2.         UN proper shipping name           Not applicable         Image: Comparison of the proper shipping name	Not applicable
14.3. Transport hazard class(es)	
Not applicable	Not applicable

Not applicable

Not applicable

Packing group

**Environmental hazards** 

14.4.

14.5. Envi

Not applicable

Safety Data Sheet

according to Regulation (EU) 2015/830

ADR	ΙΑΤΑ
	No supplementary information available
14.6.	Special precautions for user
- Overla	and transport
Not app	blicable
- Air tra	ansport
Not app	blicable
14.7.	Transport in bulk according to Annex II of Marpol and the IBC Code
Not app	blicable
SECT	ION 15: Regulatory information
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
15.1.1.	EU-Regulations
Contain	is no REACH substances with Annex XVII restrictions
Contain	is no substance on the REACH candidate list
Contain	is no REACH Annex XIV substances
15.1.2.	National regulations
No addi	itional information available
15.2.	Chemical safety assessment
No chei	mical safety assessment has been carried out
SECT	ION 16: Other information
SECT	·

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 Date of issue: 03/09/2014 Revision date: 08/01/2018

Supersedes: 20/03/2017 Version: 1.3 SECTION 1: Identification of the substance/mixture and of the company/undertaking **Product identifier** 1.1. Product form : Mixture Product name : Succinic Acid Assay Kit (Bottle 3) Product code : K-SUCC (Bottle 3) 1.2. Relevant identified uses of the substance or mixture and uses advised against **Relevant identified uses** 1.2.1. 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 Details of the supplier of the safety data sheet 1.3. Megazyme Bray Business Park A98 YV29 Bray - Ireland T +353 12861220 - F +353 12861264 cs@megazyme.com - www.megazyme.com 1.4. **Emergency telephone number** Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday] SECTION 2: Hazards identification Classification of the substance or mixture 2.1. Classification according to Regulation (EC) No. 1272/2008 [CLP] Skin corrosion/irritation, Category 2 H315 Serious eye damage/eye irritation, Category H319 2 Specific target organ toxicity - Single H335 exposure, Category 3, Respiratory tract irritation Full text of H statements : see section 16 Adverse physicochemical, human health and environmental effects May cause respiratory irritation. Causes skin irritation. 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 Hazardous ingredients : Coenzyme A, trilithium salt, CoA H315 - Causes skin irritation. Hazard statements (CLP) H319 - Causes serious eye irritation H335 - May cause respiratory irritation. Precautionary statements (CLP) : P261 - Avoid breathing dust. P264 - Wash hands thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area. P280 - Wear eye protection, protective clothing, protective gloves P302+P352 - IF ON SKIN: Wash with plenty of water. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Labelling according to: exemption for inner packaging where the contents do not exceed 10ml Hazardous ingredients : Coenzyme A, trilithium salt, CoA

Safety Data Sheet

according to Regulation (EU) 2015/830

#### 2.3. Other hazards

No additional information available

#### **SECTION 3: Composition/information on ingredients**

-				
3.1.	Substances			
Not appli	icable			

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Coenzyme A, trilithium salt, CoA	(CAS-No.) 18439-24-2 (EC-No.) 242-317-9	20 - 30	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

#### 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. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effect	ts, both acute and delayed
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Eye irritation.
4.3. Indication of any immediate medica	l attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam.
5.2. Special hazards arising from the su	bstance or mixture
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release measure	sures
6.1. Personal precautions, protective eq	uipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. Avoid breathing dust. Avoid contact with skin and eyes.
6.1.2 For omorgonou reenondere	
6.1.2. For emergency responders	· Do not attempt to take action without autoble protective equipment. For further information
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containme	ent and cleaning up
Methods for cleaning up	: Mechanically recover the product.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
For further information refer to section 13.	
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Safety Data Sheet

according to Regulation (EU) 2015/830

	<b>9</b> ( )	
SECT	ION 7: Handling and storage	je
7.1.	Precautions for safe handling	
Precau	tions for safe handling	: Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust. Avoid contact with skin and eyes.
Hygien	e measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.
7.2.	Conditions for safe storage, in	cluding any incompatibilities
Storage	e conditions	: Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.
7.3.	Specific end use(s)	
No add	itional information available	
SECT	ION 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:

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	EN 166

#### Skin and body protection:

#### Wear suitable protective clothing

Туре	Standard
Lab coat	

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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



#### Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical an	d 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	
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Safety Data Sheet

according to Regulation (EU) 2015/830

5 5 ( - )	
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.
Log Pow	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not applicable

#### 9.2. Other information

No additional information available

SECTION 10: Stability and reactivity		
10.1. Reactivity		
The product is non-reactive under normal conditions of use, storage and transport.		
10.2. Chemical stability		
Stable under normal conditions.		
10.3. Possibility of hazardous reactions		
No dangerous reactions known under normal conditions of use.		
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.

<b>SECTION 11: Toxicological inf</b>	ormation
11.1. Information on toxicological	effects
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

<b>SECTION 12: Ecological information</b>	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified

Safety Data Sheet

ccording to	Regulation (EU) 2015/830	
Chronic a	quatic toxicity	: Not classified
10.0	Provide the second state and state 100	
12.2.	Persistence and degradability	
No additio	onal information available	
12.3.	Bioaccumulative potential	
No additio	onal information available	
12.4.	Mobility in soil	
No additio	onal information available	
12.5.	Results of PBT and vPvB assessn	nent
No additio	onal information available	
12.6.	Other adverse effects	
No additio	onal information available	
SECTIO	ON 13: Disposal consideration	ons
13.1.	Waste treatment methods	
Waste tre	atment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
SECTIO	ON 14: Transport information	า
	ance with ADR / RID / IMDG / IATA /	
ADR		ΙΑΤΑ
	UN number	
Not applie	cable	Not applicable
14.2.	UN proper shipping name	
Not applie	cable	Not applicable
14.3.	Transport hazard class(es)	
Not applie		Not applicable
14.4.	Packing group	
Not applie	cable	Not applicable

Not applicable

No supplementary information available

- Air transport Not applicable

- Overland transport Not applicable

14.5. Envi Not applicable

14.6.

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

Not applicable

#### SECTION 15: Regulatory information

**Environmental hazards** 

Special precautions for user

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

#### 15.1.1. EU-Regulations

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

#### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

#### SECTION 16: Other information

Full text of H- and EUH-statements:

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according to Regulation (EU) 2015/830

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H319	Causes serious eye irritation
H335	May cause respiratory irritation.

#### SDS EU (REACH Annex II)

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



Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 03/09/2014 Revision date: 08/01/2018 Supersedes: 20/03/2017 Version: 1.3 SECTION 1: Identification of the substance/mixture and of the company/undertaking **Product identifier** 1.1. Product form : Mixture Product name : Succinic Acid Assay Kit (Bottle 2) Product code : K-SUCC (Bottle 2) 1.2. Relevant identified uses of the substance or mixture and uses advised against **Relevant identified uses** 1.2.1. 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 Details of the supplier of the safety data sheet 1.3. Megazyme Bray Business Park A98 YV29 Bray - Ireland T +353 12861220 - F +353 12861264 cs@megazyme.com - www.megazyme.com 1.4. **Emergency telephone number** Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday] SECTION 2: Hazards identification **Classification of the substance or mixture** 2.1. Classification according to Regulation (EC) No. 1272/2008 [CLP] Acute toxicity (oral), Category 4 H302 H312 Acute toxicity (dermal), Category 4 Hazardous to the aquatic environment ----H412 Chronic Hazard, Category 3 Full text of H statements : see section 16 Adverse physicochemical, human health and environmental effects Harmful in contact with skin. 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) GHS07 Signal word (CLP) : Warning

: 3-cyclohexylaminopropane-1-sulphonic acid, CAPS buffer; sodium azide Hazardous ingredients Hazard statements (CLP) : H302+H312 - Harmful if swallowed or in contact with skin H412 - Harmful to aquatic life with long lasting effects. : P264 - Wash hands thoroughly after handling. Precautionary statements (CLP) P270 - Do not eat, drink or smoke when using this product. P273 - Avoid release to the environment. P280 - Wear eye protection, protective clothing, protective gloves P301+P312 - IF SWALLOWED: Call a doctor, a POISON CENTER if you feel unwell. P302+P352 - IF ON SKIN: Wash with plenty of water. **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 : 3-cyclohexylaminopropane-1-sulphonic acid, CAPS buffer; sodium azide

	-	
No additi	onal information available	
2.3.	Other hazards	

Safety Data Sheet

according to Regulation (EU) 2015/830

### **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	60 - 70	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.		
st-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing.			
First-aid measures after eye contact			
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell. Rinse mouth.		
4.2. Most important symptoms and eff	ects, both acute and delayed		
No additional information available			
4.3. Indication of any immediate media	cal attention and special treatment needed		
Treat symptomatically.			
<b>SECTION 5: Firefighting measures</b>			
5.1. Extinguishing media			
Suitable extinguishing media	: Water spray. Dry powder. Foam.		
5.2. Special hazards arising from the s	substance or mixture		
Hazardous decomposition products in case of	: Toxic fumes may be released.		
fire			
5.3. Advice for firefighters			
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.		
SECTION 6: Accidental release me	asures		
	asures equipment and emergency procedures		
6.1. Personal precautions, protective e			
6.1.         Personal precautions, protective of           6.1.1.         For non-emergency personnel           Emergency procedures	equipment and emergency procedures		
<ul> <li>6.1. Personal precautions, protective of</li> <li>6.1.1. For non-emergency personnel</li> <li>Emergency procedures</li> <li>6.1.2. For emergency responders</li> </ul>	equipment and emergency procedures : Ventilate spillage area. Avoid contact with skin, eyes and clothing.		
6.1.         Personal precautions, protective of           6.1.1.         For non-emergency personnel           Emergency procedures	equipment and emergency procedures		
<ul> <li>6.1. Personal precautions, protective of</li> <li>6.1.1. For non-emergency personnel</li> <li>Emergency procedures</li> <li>6.1.2. For emergency responders</li> </ul>	<ul> <li>equipment and emergency procedures</li> <li>Ventilate spillage area. Avoid contact with skin, eyes and clothing.</li> <li>Do not attempt to take action without suitable protective equipment. For further information</li> </ul>		
<ul> <li>6.1. Personal precautions, protective of</li> <li>6.1.1. For non-emergency personnel</li> <li>Emergency procedures</li> <li>6.1.2. For emergency responders</li> <li>Protective equipment</li> </ul>	<ul> <li>equipment and emergency procedures</li> <li>Ventilate spillage area. Avoid contact with skin, eyes and clothing.</li> <li>Do not attempt to take action without suitable protective equipment. For further information</li> </ul>		
<ul> <li>6.1. Personal precautions, protective of</li> <li>6.1.1. For non-emergency personnel</li> <li>Emergency procedures</li> <li>6.1.2. For emergency responders</li> <li>Protective equipment</li> <li>6.2. Environmental precautions</li> </ul>	<ul> <li>equipment and emergency procedures</li> <li>Ventilate spillage area. Avoid contact with skin, eyes and clothing.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>		
<ul> <li>6.1. Personal precautions, protective of</li> <li>6.1.1. For non-emergency personnel</li> <li>Emergency procedures</li> <li>6.1.2. For emergency responders</li> <li>Protective equipment</li> <li>6.2. Environmental precautions</li> <li>Avoid release to the environment.</li> </ul>	<ul> <li>equipment and emergency procedures</li> <li>Ventilate spillage area. Avoid contact with skin, eyes and clothing.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>		
<ul> <li>6.1. Personal precautions, protective of</li> <li>6.1.1. For non-emergency personnel</li> <li>Emergency procedures</li> <li>6.1.2. For emergency responders</li> <li>Protective equipment</li> <li>6.2. Environmental precautions</li> <li>Avoid release to the environment.</li> <li>6.3. Methods and material for container</li> </ul>	<ul> <li>equipment and emergency procedures</li> <li>Ventilate spillage area. Avoid contact with skin, eyes and clothing.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>		
<ul> <li>6.1. Personal precautions, protective of</li> <li>6.1.1. For non-emergency personnel</li> <li>Emergency procedures</li> <li>6.1.2. For emergency responders</li> <li>Protective equipment</li> <li>6.2. Environmental precautions</li> <li>Avoid release to the environment.</li> <li>6.3. Methods and material for container</li> <li>Methods for cleaning up</li> </ul>	<ul> <li>equipment and emergency procedures</li> <li>Ventilate spillage area. Avoid contact with skin, eyes and clothing.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>		
<ul> <li>6.1. Personal precautions, protective of</li> <li>6.1.1. For non-emergency personnel</li> <li>Emergency procedures</li> <li>6.1.2. For emergency responders</li> <li>Protective equipment</li> <li>6.2. Environmental precautions</li> <li>Avoid release to the environment.</li> <li>6.3. Methods and material for container</li> <li>Methods for cleaning up</li> <li>Other information</li> </ul>	<ul> <li>equipment and emergency procedures</li> <li>Ventilate spillage area. Avoid contact with skin, eyes and clothing.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>		
<ul> <li>6.1. Personal precautions, protective of</li> <li>6.1.1. For non-emergency personnel</li> <li>Emergency procedures</li> <li>6.1.2. For emergency responders</li> <li>Protective equipment</li> <li>6.2. Environmental precautions</li> <li>Avoid release to the environment.</li> <li>6.3. Methods and material for container</li> <li>Methods for cleaning up</li> <li>Other information</li> <li>6.4. Reference to other sections</li> </ul>	<ul> <li>equipment and emergency procedures</li> <li>Ventilate spillage area. Avoid contact with skin, eyes and clothing.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>		
<ul> <li>6.1. Personal precautions, protective of</li> <li>6.1.1. For non-emergency personnel</li> <li>Emergency procedures</li> <li>6.1.2. For emergency responders</li> <li>Protective equipment</li> <li>6.2. Environmental precautions</li> <li>Avoid release to the environment.</li> <li>6.3. Methods and material for container</li> <li>Methods for cleaning up</li> <li>Other information</li> <li>6.4. Reference to other sections</li> <li>For further information refer to section 13.</li> </ul>	<ul> <li>equipment and emergency procedures </li> <li>Ventilate spillage area. Avoid contact with skin, eyes and clothing. </li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". </li> </ul>		
<ul> <li>6.1. Personal precautions, protective of</li> <li>6.1.1. For non-emergency personnel Emergency procedures</li> <li>6.1.2. For emergency responders Protective equipment</li> <li>6.2. Environmental precautions Avoid release to the environment.</li> <li>6.3. Methods and material for container Methods for cleaning up Other information</li> <li>6.4. Reference to other sections For further information refer to section 13.</li> <li>SECTION 7: Handling and storage</li> </ul>	<ul> <li>equipment and emergency procedures</li> <li>Ventilate spillage area. Avoid contact with skin, eyes and clothing.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>		

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Hygiene measures

: Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in a well-ventilated place. Keep cool.	
7.3. Specific end use(s)		
No additional information available		
SECTION 8: Exposure controls/personal protection		

#### 8.1. Control parameters

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

#### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Hand protection:

#### Protective gloves

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

### Eye protection:

Safety glasses

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

#### Skin and body protection:

Wear suitable protective clothing

Туре	Standard
Lab coat	

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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



#### Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties				
9.1. Information on basic physical and chemical properties				
Physical state	: Solid			
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			

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according to Regulation (EU) 2015/830

5 5 ( , , , , , , , , , , , , , , , , ,	
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.
Log Pow	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not applicable

#### 9.2. Other information

No additional information available

SECT	ION 10: Stability and reactivity
SECT	ion to. Stability and reactivity
10.1.	Reactivity
The pro	duct is non-reactive under normal conditions of use, storage and transport.
10.2.	Chemical stability
Stable ι	under normal conditions.
10.3.	Possibility of hazardous reactions
Contact	with acids liberates very toxic gas.
10.4.	Conditions to avoid
None u	nder recommended storage and handling conditions (see section 7).
10.5.	Incompatible materials
Acids.	
10.6.	Hazardous decomposition products

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

SECTION 11: Toxicological info	ormation			
11.1. Information on toxicological effects				
Acute toxicity (oral)	: Oral: Harmful if swallowed.			
Acute toxicity (dermal) : Dermal: Harmful in contact with skin.				
Acute toxicity (inhalation)	: Not classified			
ATE CLP (oral)	421.0880916288 mg/kg bodyweight			
ATE CLP (dermal)	1725.7609036712 mg/kg bodyweight			
Skin corrosion/irritation	: Not classified			
Serious eye damage/irritation	: Not classified			
Respiratory or skin sensitisation	: Not classified			
Germ cell mutagenicity	: Not classified			
Carcinogenicity	: Not classified			
Reproductive toxicity	: Not classified			
STOT-single exposure	: Not classified			
STOT-repeated exposure	: Not classified			
Aspiration hazard	: Not classified			

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according to Regulation (EU) 2015/830

SECTION 12: Ecological informa	tion					
12.1. Toxicity						
Ecology - general : Harmful to aquatic life with long lasting effects. Harmful to aquatic life.						
Acute aquatic toxicity : Not classified						
Chronic aquatic toxicity	hronic aquatic toxicity : Harmful to aquatic life with long lasting effects.					
12.2. Persistence and degradability	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 asses	ssment					
No additional information available						
42.C Other educates offerste						
12.6. Other adverse effects						
No additional information available						
SECTION 13: Disposal considera	ations					
13.1. Waste treatment methods						
Waste treatment methods	Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.					
SECTION 14: Transport informat						
In accordance with ADR / RID / IMDG / IAT.	A / ADN					
ADR	IATA					
14.1. UN number						
Not applicable	Not applicable					
14.2. UN proper shipping name						
Not applicable	Not applicable					
14.3. Transport hazard class(es)	Net appliable					
Not applicable	Not applicable					
14.4.         Packing group           Not applicable         Packing group	Not applicable					
14.5. Environmental hazards						
Not applicable	Not applicable					
····	No supplementary information available					
14.6 Special procestions for user						

#### 14.6. Special precautions for user

#### - Overland transport

Not applicable

#### - Air transport

Not applicable

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

Not applicable

#### SECTION 15: Regulatory information

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

### 15.1.1. EU-Regulations

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

#### 15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment
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No chemical safety assessment has been carried out 15/03/2018 EN (E

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#### **SECTION 16: Other information**

#### Full text of H- and EUH-statements:

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

SDS EU (REACH Annex II)

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



1.1.

1.2.

1.2.1.

1.2.2.

1.3.

1.4.

2.1.

2

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### Succinic Acid Assay Kit (Bottle 1)

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 03/09/2014 Revision date: 08/01/2018 Supersedes: 20/03/2017 Version: 1.3 SECTION 1: Identification of the substance/mixture and of the company/undertaking **Product identifier** Product form : Mixture Product name : Succinic Acid Assay Kit (Bottle 1) Product code : K-SUCC (Bottle 1) Relevant identified uses of the substance or mixture and uses advised against **Relevant identified uses** Industrial/Professional use spec : For professional use only Use of the substance/mixture : Use as laboratory reagent Uses advised against No additional information available 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 **Emergency telephone number** Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday] SECTION 2: Hazards identification **Classification of the substance or mixture** Classification according to Regulation (EC) No. 1272/2008 [CLP] Serious eye damage/eye irritation, Category H319 Full text of H statements : see section 16 Adverse physicochemical, human health and environmental effects Causes serious eye irritation. Label elements Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP)



: H319 - Causes serious eye irritation P264 - Wash hands thoroughly after handling. P280 - Wear eye protection, protective clothing, protective gloves 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.

: EUH032 - Contact with acids liberates very toxic gas.

EUH-statements

Signal word (CLP)

Hazard statements (CLP)

Precautionary statements (CLP)

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

No labelling required

Other hazards 2.3.

No additional information available

#### **SECTION 3: Composition/information on ingredients**

#### **Substances** 3.1.

Not applicable

Safety Data Sheet

according to Regulation (EU) 2015/830

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Glycylglycine	(CAS-No.) 556-50-3 (EC-No.) 209-127-8	10 - 20	Eye Irrit. 2, H319
MAGNESIUM CHLORIDE	(CAS-No.) 7786-30-3 (EC-No.) 232-094-6 (REACH-no) 01-2119485597-19	1 - 5	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318
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	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effe	cts, both acute and delayed
Symptoms/effects after eye contact	: Eye irritation.
4.3. Indication of any immediate medica	al attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Special hazards arising from the su	ubstance or mixture
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release mea	isures
6.1. Personal precautions, protective e	quipment 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 containm	ent and cleaning up
Methods for cleaning up	: Take up liquid spill into absorbent material.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
For further information refer to section 13.	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Ensure good ventilation of the work station. 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.
15/03/2018	EN (English) 31/35

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

#### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Hand protection:

#### Protective gloves

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

#### Eye protection:

Safety glasses

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

#### Skin and body protection:

Wear suitable protective clothing

Туре	Standard
Lab coat	

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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



#### Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and chemical properties		
Physical state	: Liquid	
Colour	: No data available 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	

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according to Regulation (EU) 2015/830

5 5 ( )	
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.
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

SEC	ΓΙΟΝ 10: Stabili	ty and reactivity	
10.1	-		
10 1	Reactivity		

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

The pro	duct is non-reactive under normal conditions of use, storage and transport.		
10.2.	Chemical stability		
Stable u	inder normal conditions.		
10.3.	10.3. Possibility of hazardous reactions		
Contact	with acids liberates very toxic gas.		
10.4.	Conditions to avoid		
None ur	nder recommended storage and handling conditions (see section 7).		
10.5.	Incompatible materials		
Acids.			
10.6.	Hazardous decomposition products		

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

SECTION 44. Toxicological informatio	
SECTION 11: Toxicological information	
11.1. Information on toxicological effects	
Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified
MAGNESIUM CHLORIDE (7786-30-3)	
LD50 oral rat	2800 mg/kg
LD50 oral	2800 mg/kg bodyweight
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	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	
2.1. Toxicity	
cology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
cute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified
MAGNESIUM CHLORIDE (7786-30-3)	
LC50 fish 1	1970 - 3880 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	140 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 other aquatic organisms 1	548.4 mg/l waterflea
EC50 other aquatic organisms 2	> 100 mg/l
EC50 72h algae (1)	2200 mg/l (Species: Desmodesmus subspicatus)

Glycylglycine (556-50-3)		
Persistence and degradability	Biodegradability in water: no data available.	
MAGNESIUM CHLORIDE (7786-30-3)		
Persistence and degradability	Biodegradability: not applicable.	
Biochemical oxygen demand (BOD)	Not applicable	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
12.3. Bioaccumulative potential		
Glycylglycine (556-50-3)		
Bioaccumulative potential	Not established.	
MAGNESIUM CHLORIDE (7786-30-3)		
Bioaccumulative potential	No bioaccumulation data 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	
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

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according to Regulation (EU) 2015/830

#### - Air transport

#### Not applicable

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

Not applicable

#### SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

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

#### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

#### **SECTION 16: Other information**

Full text of H- and EUH-stater	nents:
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 Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H290	May be corrosive to metals.
H300	Fatal if swallowed.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
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.