

Urea/Ammonia Assay Kit (Rapid)

Kit Safety Information Sheet (SIS)

Issue date (US): 12/14/2017 Revision date (US): 4/12/2022 Supersedes (US): 4/28/2021 Version (US): 1.3

SECTION 1: Kit identification

1.1 Kit identifier

Product name

Product code

: Urea/Ammonia Assay Kit (Rapid)

: K-URAMR

1.2 Details of the supplier of the Kit safety 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	Weight or Volume	Quantity	Unit	GHS US classification
Urea/Ammonia Assay Kit (Rapid) (Bottle 1)	Buffer		1	pcs (pieces)	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 1B, H360
Urea/Ammonia Assay Kit (Rapid) (Bottle 2)	Reagent		1	pcs (pieces)	Acute Tox. 4 (Oral), H302
Urea/Ammonia Assay Kit (Rapid) (Bottle 3)	Reagent		1	pcs (pieces)	Eye Irrit. 2, H319
Urea/Ammonia Assay Kit (Rapid) (Bottle 4)	Buffer		1	pcs (pieces)	Resp. Sens. 1, H334
Urea/Ammonia Assay Kit (Rapid) (Bottle 5)	Buffer		1	pcs (pieces)	Not classified

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

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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/doctor/physician 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
Hazardous decomposition products in case of fire	Complete protective clothing : Toxic fumes may be released
SECTION 8: Transport information	
In accordance with DOT / TDG / IMDG / IATA	
8.1. UN number	
Not regulated for transport	
8.2. UN proper shipping name	
Proper Shipping Name (DOT)	: Not applicable
Proper Shipping Name (TDG) Proper Shipping Name (IMDG)	: Not applicable : Not applicable
Proper Shipping Name (IATA)	: Not applicable
8.3. Transport hazard class(es)	
DOT Transport hazard class(es) (DOT)	: Not applicable
TDG Transport hazard class(es) (TDG)	: Not applicable
IMDG	
Transport hazard class(es) (IMDG)	: Not applicable
ΙΑΤΑ	
Transport hazard class(es) (IATA)	: Not applicable
8.4. Packing group	
Packing group (DOT) Packing group (TDG)	: Not applicable : Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
8.5. Environmental hazards	
Other information	: No supplementary information available.
8.6. Special precautions for user	
DOT No data available	

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TDG

No data available

IMDG

No data available

IATA No data available

8.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 9: Other information

No data available



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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 11/23/2017 Revision date: 3/21/2022 Supersedes: 11/23/2017 Version: 1.0

SECTION 1: Identification

1.1. Identification		
Product form Product name Product code	: Mixture : Urea/Ammonia Assay Kit (Rapid) (Bottle 1) : K-URAMR (Bottle 1)	
1.2. Recommended use and restrictions on use		
Use of the substance/mixture	ne substance/mixture : Use as laboratory reagent	
1.3. Supplier		
Manufacturer Megazyme Bray Business Park Bray, County Wicklow, A98 YV29 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: Hazard(s) identification 2.1. Classification of the substance or m	ixture	
GHS US classification		
Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2 Reproductive toxicity Category 1B	Causes skin irritation Causes serious eye irritation May damage fertility or the unborn child	
2.2. GHS Label elements, including preca	autionary statements	
GHS US labeling		
Hazard pictograms (GHS US)		
Signal word (GHS US) Hazard statements (GHS US)	 Danger Causes skin irritation Causes serious eye irritation May damage fertility or the unborn child 	
Precautionary statements (GHS US)	 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash hands thoroughly after handling. Wear eye protection, protective clothing, protective gloves If on skin: Wash with plenty of water. 	
2.3. Other hazards which do not result in	classification	

No additional information available

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2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
triethanolamine	2,2',2"- nitrilotriethanol / 2,2',2"-nitrilo- tris(ethanol) / 2,2',2"- trihydroxytriethyla mine / daltogen / ethanol, 2,2',2"- nitrilotri- / ethanol, 2,2',2"-nitrilotris- / nitrilo-2,2',2"- triethanol / sterolamide / sting-kill / TEA (=triethanolamine) / thiofaco T-35 / tri(2- hydroxyethyl)amin e / triethylolamine / triethylolamine / trihydroxytriethyla mine / tris(2- hydroxyethyl)amin e / tris(hydroxyethyl) amine / trolamine	CAS-No.: 102-71-6	5 – 10	Not classified
imidazole		CAS-No.: 288-32-4	1 – 5	Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 Repr. 1B, H360

Full text of hazard classes and 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.

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First-aid measures after skin contact :	Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician. Immediately call a poison center or doctor/physician. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention. Immediately call a poison center 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 center or doctor/physician. Call a poison center/doctor/physician if you feel unwell.
4.2. Most important symptoms and effects (a	cute and delayed)
symptoms	Based on available data, the classification criteria are not met. Causes severe skin burns and eye damage. Suspected of damaging fertility. May damage the unborn child.
- ,	Irritation. Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishin	g media
Suitable extinguishing media Unsuitable extinguishing media	: Sand. Water spray. Dry powder. Foam. Carbon dioxide. : Do not use a heavy water stream.
5.2. Specific hazards arising from the cher	nical
Reactivity in case of fire Hazardous decomposition products in case of fire	Thermal decomposition generates : Corrosive vapors.Toxic fumes may be released.
5.3. Special protective equipment and pred	cautions for fire-fighters
Firefighting instructions Protection during firefighting	 Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering 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
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6.1. Personal precautions, protective equipment 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.	

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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.

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 vapor. 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	ny incompatibilities	
Technical measures Storage conditions	 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. 	
Incompatible materials	: Sources of ignition. Direct sunlight.	

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Urea/Ammonia Assay Kit (Rapid) (Bottle 1)	
No additional information available	
triethanolamine (102-71-6)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Triethanolamine
ACGIH OEL TWA	5 mg/m³ (Triethanolamine; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
Remark (ACGIH)	Eye & skin irr
imidazole (288-32-4)	
No additional information available	

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Appropriate engineering controls: Ensure good ventilation of the work station.Environmental exposure controls: Avoid release to the environment.				
protective equipment				
Permeation Thickness (mm) Pene		Penetration		
3 (> 60 minutes) 3			2 (< 1.5)	
Eye protection:				
Type Field of application Characteristics				
Safety glasses Droplet		With side shields		
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.				
	Avoid release to the environmer rotective equipment Permeation 3 (> 60 minutes) Field of application Droplet	Avoid release to the environment.	Avoid release to the environment.	

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

9.1. Information on basic physical and	hemical properties
Physical state	: Liquid
Appearance	: Clear, colorless liquid.
Color	Colorless
Odor	: characteristic
Odor threshold	: No data available
pН	: No data available
Melting point	: Not applicable
Freezing point	No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.

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N/	N. J. A. S. State
Vapor pressure	: No data available
Relative vapor 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
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates : Corrosive vapors.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong bases.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information		
11.1. Information on toxicological effects		
Acute toxicity (dermal)	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 body weight	
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)	

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triethanolamine (102-71-6)	
LD50 dermal	> 10000 mg/kg body weight
LC50 Inhalation - Rat (Dust/Mist)	> 1.8 mg/l
ATE US (oral)	8000 mg/kg body weight
imidazole (288-32-4)	
LD50 oral	960 mg/kg
ATE US (oral)	500 mg/kg body weight
Skin corrosion/irritation	: Causes skin irritation.
triethanolamine (102-71-6)	
pH	11 (25 %)
Serious eye damage/irritation	: Causes serious eye irritation.
triethanolamine (102-71-6)	
рН	11 (25 %)
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
triethanolamine (102-71-6)	
IARC group	3 - Not classifiable
Reproductive toxicity	: May damage fertility or the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
triethanolamine (102-71-6)	
Viscosity, kinematic	53.381 mm²/s
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
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.

SECTION 12: Ecological information	
12.1. Toxicity	
	The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
triethanolamine (102-71-6)	
LC50 - Fish [1]	11800 mg/l
EC50 - Other aquatic organisms [1]	2038 mg/l waterflea
LC50 - Fish [2]	450 – 1000 mg/l (LC50; 96 h; Lepomis macrochirus)
EC50 - Other aquatic organisms [2]	216 mg/l

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imidazole (288-32-4)		
NOEC chronic algae	25 mg/l	
12.2. Persistence and degradability		
Urea/Ammonia Assay Kit (Rapid) (Bottle 1)		
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		
Urea/Ammonia Assay Kit (Rapid) (Bottle 1)		
Bioaccumulative potential	Not established.	
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. Other adverse effects		
Other information	: Avoid release to the environment.	

SECTION 13: Disposal considerations	
13.1. Disposal 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 DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

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14.2. UN proper shipping name	
Proper Shipping Name (DOT) Proper Shipping Name (TDG) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	 Not regulated Not regulated Not regulated Not regulated
14.3. Transport hazard class(es)	
DOT Transport hazard class(es) (DOT)	: Not regulated
TDG Transport hazard class(es) (TDG)	: Not regulated
IMDG Transport hazard class(es) (IMDG)	: Not regulated
IATA Transport hazard class(es) (IATA)	: Not regulated
14.4. Packing group	
Packing group (DOT) Packing group (TDG) Packing group (IMDG) Packing group (IATA)	 Not regulated Not regulated Not regulated Not regulated Not regulated
14.5. Environmental hazards	
Other information	: No supplementary information available.
14.6. Special precautions for user	
DOT Not regulated	
TDG Not regulated	
IMDG Not regulated	
IATA Not regulated	
14.7. Transport in bulk according to Anne	ex II of MARPOL 73/78 and the IBC Code
Not applicable	
SECTION 15: Regulatory information	

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	J	Commercial status	Flags
triethanolamine	102-71-6	Present	Active	
imidazole	288-32-4	Not present	-	

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15.2. International regulations		
CANADA No additional information available		
EU-Regulations No additional information available		
National regulations No additional information available		
15.3 LIS State regulations		

Component	State or local regulations	
triethanolamine(102-71-6)	U.S New Jersey - Right to Know Hazardous Substance List	

SECTION 16: Other information			
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations			
Revision date	: 3/21/2022		
Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling 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.		
Safety Data Sheet (SDS), USA			

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



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SECTION 1: Identification

1.1. Identification	
Product form Product name Product code	: Mixture : Urea/Ammonia Assay Kit (Rapid) (Bottle 2) : K-URAMR (Bottle 2)
1.2. Recommended use and restrictions o	on use
Use of the substance/mixture	: Use as laboratory reagent
1.3. Supplier	
Manufacturer Megazyme Bray Business Park Bray, County Wicklow, A98 YV29 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: Hazard(s) identification 2.1. Classification of the substance or mix	xture
GHS US classification	
Acute toxicity (oral) Category 4	Harmful if swallowed
2.2. GHS Label elements, including preca	utionary statements
GHS US labeling Hazard pictograms (GHS US)	
Signal word (GHS US) Hazard statements (GHS US) Precautionary statements (GHS US)	 Warning Harmful if swallowed Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. If swallowed: Call a doctor, a POISON CENTER if you feel unwell. Rinse mouth. Dispose of contents/container to
2.3. Other hazards which do not result in	

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

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SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
3-cyclohexylaminopropane-1-sulphonic acid, CAPS buffer		CAS-No.: 1135-40-6	20 – 30	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312

Full text of hazard classes and 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. Call a poison center/doctor/physician if you feel unwell.
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 victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
First-aid measures after skin contact	: Immediately call a poison center or doctor/physician. Wash skin with plenty of water.
First-aid measures after eye contact	: Immediately call a poison center or doctor/physician. Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Do NOT induce vomiting. Immediately call a poison center or doctor/physician. Rinse mouth. Call a poison center/doctor/physician if you feel unwell.
4.2. Most important symptoms and effects ((acute and delayed)
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/effects	: Causes severe skin burns and eye damage. Suspected of damaging fertility. May damage the unborn child.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishing	g media
Suitable extinguishing media Unsuitable extinguishing media	Sand. Water spray. Dry powder. Foam.Do not use a heavy water stream.
5.2. Specific hazards arising from the chen	nical
Reactivity in case of fire Hazardous decomposition products in case of fire	Thermal decomposition generates : Corrosive vapors.Toxic fumes may be released.
5.3. Special protective equipment and prec	autions for fire-fighters
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

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Protection during firefighting	: 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	e measures
6.1. Personal precautions, protec	tive equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel.
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.

6.3. Methods and material for contain	ment and cleaning up
Methods for cleaning up	: Mechanically recover the product. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
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.

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. 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 vapor. Wash Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work thoroughly after handling. 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	 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 in a well-ventilated place. Keep cool.
Incompatible materials	: Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available

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3-cyclohexylaminopro	pane-1-sulphonic acid	, CAPS buffer (1135-40-6)			
No additional information a	vailable				
8.2. Appropriate engine	eering controls				
oppropriate engineering controls: Ensure good ventilation of the work station.Environmental exposure controls: Avoid release to the environment.					
8.3. Individual protection	on measures/Personal	protective equipment			
Personal protective equip Avoid all unnecessary expos					
Materials for protective c	lothing:				
Nitrile rubber					
Hand protection:					
Wear protective gloves.					
Туре	Material	Permeation	Thickness (mm) Penetration		Penetration
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)	3		2 (< 1.5)
Eye protection:					
Chemical goggles or face s	hield. Safety glasses				
Туре		Field of application		Characteristics	
Safety glasses	Safety glasses Dust With side shields			ds	
Skin and body protection	:				
Wear suitable protective clo	othing				
Respiratory protection:					
In case of insufficient ventil	ation, wear suitable respira	tory equipment			
Personal protective equip	ment symbol(s):				



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties			
9.1. Information on basic ph	/sical and chemical properties		
Physical state	: Solid		
Color	: Colorless		
Odor	: characteristic		
Odor threshold	: No data available		
pH	: No data available		
Melting point	: No data available		
Freezing point	: Not applicable		
Boiling point	: No data available		

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9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates : Corrosive vapors.

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong bases.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information		
11.1. Information on toxicological effects		
Acute toxicity (dermal)	Harmful if swallowed. Not classified Not classified	
Urea/Ammonia Assay Kit (Rapid) (Bottle 2)		
ATE US (oral)	1670.007 mg/kg body weight	
3-cyclohexylaminopropane-1-sulphonic acid, CAPS buffer (1135-40-6)		
ATE US (oral)	500 mg/kg body weight	

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3-cyclohexylaminopropane-1-sulphonic a	cid, CAPS buffer (1135-40-6)
ATE US (dermal)	1100 mg/kg body weight
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: 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
Viscosity, kinematic	: Not applicable
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/effects	: Causes severe skin burns and eye damage. Suspected of damaging fertility. May damage the unborn child.

SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - general :	The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.	
12.2. Persistence and degradability		
Urea/Ammonia Assay Kit (Rapid) (Bottle 2)		
Persistence and degradability	Not established.	
12.3. Bioaccumulative potential		

Urea/Ammonia Assay Kit (Rapid) (Bottle 2)		
Bioaccumulative potential	Not established.	
12.4. Mobility in soil		
No additional information available		
12.5. Other adverse effects		

Other information

: Avoid release to the environment.

SECTION 13: Disposal considerations				
13.1. Disposal 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.			

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SECTION 14: Transport information	
In accordance with DOT / TDG / IMDG / IATA	
14.1. UN number	
Not regulated for transport	
14.2. UN proper shipping name	
Proper Shipping Name (DOT) Proper Shipping Name (TDG) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	 Not regulated Not regulated Not regulated Not regulated
14.3. Transport hazard class(es)	
DOT Transport hazard class(es) (DOT)	: Not regulated
TDG Transport hazard class(es) (TDG)	: Not regulated
IMDG Transport hazard class(es) (IMDG)	: Not regulated
IATA Transport hazard class(es) (IATA)	: Not regulated
14.4. Packing group	
Packing group (DOT) Packing group (TDG) Packing group (IMDG) Packing group (IATA)	 Not regulated Not regulated Not regulated Not regulated
14.5. Environmental hazards	
Other information	: No supplementary information available.
14.6. Special precautions for user	
DOT Not regulated	
TDG Not regulated	
IMDG Not regulated	
IATA Not regulated	
14.7. Transport in bulk according to Annex I	II of MARPOL 73/78 and the IBC Code
Not applicable	
SECTION 15: Regulatory information	

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

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Name	CAS-No.	Listing	Commercial status	Flags
3-cyclohexylaminopropane-1-sulphonic acid, CAPS buffer	1135-40-6	Not present	-	
15.2. International regulations				
CANADA				
No additional information available				
EU-Regulations				
No additional information available				
National regulations				
No additional information available				
15.3. US State regulations				
No additional information available				
SECTION 16: Other information				
according to Federal Register / Vol. 77, No. 58 / Monda Revision date	y, March 26, 2012 / 3/21/2022	Rules and Regulations		

Revision date	: 3/21/2022
Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE
	COUNCIL of 16 December 2008 on classification, labeling 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.

Safety Data Sheet (SDS), USA

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



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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 12/14/2017 Revision date: 3/21/2022 Supersedes: 4/28/2021 Version: 1.1

SECTION 1: Identification

1.1. Identification	
Product form Product name Product code	: Mixture : Urea/Ammonia Assay Kit (Rapid) (Bottle 3) : K-URAMR (Bottle 3)
1.2. Recommended use and restrictions of	on use
Use of the substance/mixture	: Use as laboratory reagent
1.3. Supplier	
Manufacturer Megazyme Bray Business Park Bray, County Wicklow, A98 YV29 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: Hazard(s) identification	
2.1. Classification of the substance or min	xture
GHS US classification	
Serious eye damage/eye irritation Category 2	Causes serious eye irritation
2.2. GHS Label elements, including preca	utionary statements
GHS US labeling	
Hazard pictograms (GHS US)	
Signal word (GHS US) Hazard statements (GHS US) Precautionary statements (GHS US)	 Warning Causes serious eye irritation Wash hands thoroughly after handling. Wear eye protection, protective clothing, protective gloves IF IN EYES: 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.
2.3. Other hazards which do not result in	classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

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SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
lithium sulfate	lithium sulfate(2:1) / lithium sulfate,anhydrous / lithium sulphate / sulfuric acid, dilithium salt / sulfuric acid,lithium salt(1:2)	CAS-No.: 10377-48-7	20 – 30	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319

Full text of hazard classes and 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.
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 victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
First-aid measures after skin contact	: Immediately call a poison center or doctor/physician. Wash skin with plenty of water.
First-aid measures after eye contact First-aid measures after ingestion	 Immediately call a poison center 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 center or doctor/physician. Call a poison
4.2. Most important symptoms and effect	center/doctor/physician if you feel unwell.
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/effects	: Causes severe skin burns and eye damage. Suspected of damaging fertility. May damage the unborn child.
Symptoms/effects after eye contact	: Eye irritation.
4.3. Immediate medical attention and spe	cial treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures			
5.1. Suitable (and unsuitable) extinguishing	media		
Suitable extinguishing media Unsuitable extinguishing media	Sand. Water spray. Dry powder. Foam. Carbon dioxide.Do not use a heavy water stream.		

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5.2. Specific hazards arising from the chemical		
Reactivity in case of fire Hazardous decomposition products in case of fire	Thermal decomposition generates : Corrosive vapors.Toxic fumes may be released.	
5.3. Special protective equipment and precautions for fire-fighters		
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.	
Protection during firefighting	: 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 eq	uipment and emergency procedures	
6.1.1. For non-emergency personnel		
Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes.	
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.	

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.	
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.

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 vapor. Avoid contact with skin and eyes. Wear personal protective equipment. Wash Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work thoroughly after handling. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, including	g any incompatibilities
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 in a well-ventilated place. Keep cool. Sources of ignition. Direct sunlight.

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SECTION 8: Exposure controls/personal protection					
8.1. Control parameters					
Urea/Ammonia Assay	Urea/Ammonia Assay Kit (Rapid) (Bottle 3)				
No additional information a	No additional information available				
lithium sulfate (10377-48-7)					
No additional information a	vailable				
8.2. Appropriate engine	eering controls				
Appropriate engineering cor Environmental exposure cor		Ensure good ventilation of the w Avoid release to the environmer			
8.3. Individual protection	on measures/Personal	protective equipment			
Personal protective equip Avoid all unnecessary expos					
Materials for protective c	lothing:				
Nitrile rubber					
Hand protection:					
Wear protective gloves.					
Туре	Material	Permeation	Thickness (m	n)	Penetration
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)	3		2 (< 1.5)
Eye protection:					
Chemical goggles or face s	shield. Safety glasses				
Туре		Field of application		Characteristic	S
Safety glasses	Safety glasses Droplet With side shields			ds	
Skin and body protection:					
Wear suitable protective clothing					
Respiratory protection:					
In case of insufficient ventilation, wear suitable respiratory equipment					
Personal protective equipment symbol(s):					



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties			
9.1. Information on basic ph	sical and chemical properties		
Physical state	: Liquid		

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Color	: milky
Odor	: There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure.
	Mixture contains one or more component(s) which have the following odour:
	No data available on odour
Odor threshold	: No data available
рН	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor 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
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates : Corrosive vapors.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong bases.

10.6. Hazardous decomposition products

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

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SECTION 11: Toxicological informatic	on
11.1. Information on toxicological effects	
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
ATE US (oral)	580 mg/kg body weight
Skin corrosion/irritation	: Not classified
lithium sulfate (10377-48-7)	
рН	8 (4 %)
Serious eye damage/irritation	: Causes serious eye irritation.
lithium sulfate (10377-48-7)	
рН	8 (4 %)
Respiratory or skin sensitization	: 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
Viscosity, kinematic	: No data available
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/effects	: Causes severe skin burns and eye damage. Suspected of damaging fertility. May damage the unborn child.
Symptoms/effects after eye contact	: Eye irritation.

SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - general :	The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.	
12.2. Persistence and degradability		
Urea/Ammonia Assay Kit (Rapid) (Bottle 3)		
Persistence and degradability	Not established.	
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	

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12.3. Bioaccumulative potential		
Urea/Ammonia Assay Kit (Rapid) (Bottle 3)		
Bioaccumulative potential	Not established.	
lithium sulfate (10377-48-7)		
Bioaccumulative potential	Not established.	
12.4. Mobility in soil		
No additional information available		
12.5. Other adverse effects		
Other information	: Avoid release to the environment.	
SECTION 13: Disposal considerations		
13.1. Disposal 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 DOT / TDG / IMDG / IATA		
14.1. UN number		
Not regulated for transport		
14.2. UN proper shipping name		
Proper Shipping Name (DOT) Proper Shipping Name (TDG) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	 Not regulated Not regulated Not regulated Not regulated Not regulated 	
14.3. Transport hazard class(es)		
DOT Transport hazard class(es) (DOT)	: Not regulated	
TDG Transport hazard class(es) (TDG)	: Not regulated	
IMDG Transport hazard class(es) (IMDG)	: Not regulated	
ΙΑΤΑ		

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Packing group (IMDG) Packing group (IATA)	Not regulatedNot regulated
14.5. Environmental hazards	
Other information	: No supplementary information available.
14.6. Special precautions for user	
DOT Not regulated	
TDG Not regulated	
IMDG Not regulated	
IATA Not regulated	

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Name	CAS-No.	Listing	Commercial status	Flags
lithium sulfate	10377-48-7	Not present	-	

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information	tion
according to Federal Register / Vol. 7	7, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Revision date	: 3/21/2022
Data sources	REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling 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.
Safety Data Sheet (SDS), USA	

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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 Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 11/15/2017 Revision date: 3/21/2022 Supersedes: 11/15/2017 Version: 1.0

SECTION 1: Identification

1.1. Identification	
Product form Product name Product code	: Mixture : Urea/Ammonia Assay Kit (Rapid) (Bottle 4) : K-URAMR (Bottle 4)
1.2. Recommended use and restrictions of	on use
Use of the substance/mixture	: Use as laboratory reagent
1.3. Supplier	
Manufacturer Megazyme Bray Business Park Bray, County Wicklow, A98 YV29 Ireland T +353 12861220 - F +353 12861264 cs@megazyme.com - www.megazyme.com	
Emergency number	: +353 12861220 [9 am to 5 pm GMT - Monday to Friday]
2.1. Classification of the substance or mi GHS US classification Respiratory sensitization, Category 1	xture May cause an allergy or asthma symptoms or breathing difficulties if inhaled
2.2. GHS Label elements, including preca	utionary statements
GHS US labeling	
Hazard pictograms (GHS US)	
Signal word (GHS US) Hazard statements (GHS US) Precautionary statements (GHS US)	 Danger May cause an allergy or asthma symptoms or breathing difficulties if inhaled Avoid breathing spray, mist. [In case of inadequate ventilation] wear Dust respirator. If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER, a doctor. Dispose of contents/container to
2.3. Other hazards which do not result in	classification
No additional information available	

2.4. Unknown acute toxicity (GHS US)

No additional information available

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SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
Urease		CAS-No.: 9002-13-5	0.1 – 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures		
4.1. Description of first aid measures		
First-aid measures general First-aid measures after inhalation	 Call a poison center/doctor/physician if you feel unwell. 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 First-aid measures after eye contact First-aid measures after ingestion	 Wash skin with plenty of water. Rinse eyes with water as a precaution. Call a poison center/doctor/physician if you feel unwell. 	
4.2. Most important symptoms and effects (acute and delayed)		
Symptoms/effects after inhalation	: May cause an allergy or asthma symptoms or breathing difficulties if inhaled.	
4.3. Immediate medical attention and special treatment, if necessary		

Treat symptomatically.

SECTION 5: Fire-fighting measures		
5.1. Suitable (and unsuitable) extinguishing media		
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.	
5.2. Specific hazards arising from the chemical		
Hazardous decomposition products in case of fire	: Toxic fumes may be released.	
5.3. Special protective equipment and precautions for fire-fighters		
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. Avoid breathing dust/fume/gas/mist/vapors/spray.

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6.1.2. For emergency resp	onders			
Protective equipment		Do not attempt to take action wit to section 8: "Exposure controls,		nent. For further information refer
6.2. Environmental pre	cautions			
Avoid release to the environ	iment.			
6.3. Methods and mate	rial for containment and	d cleaning up		
Methods for cleaning up Other information		Take up liquid spill into absorber Dispose of materials or solid res		
6.4. Reference to other	sections			
For further information refer	to section 13.			
SECTION 7: Handling	g and storage			
7.1. Precautions for sa	fe handling			
Precautions for safe handlin	ig :	Ensure good ventilation of the w		ective equipment. Avoid
Hygiene measures		breathing dust/fume/gas/mist/va Do not eat, drink or smoke wher product.		sh hands after handling the
7.2. Conditions for safe	e storage, including any	/ incompatibilities		
Storage conditions	:	Store in a well-ventilated place.	Keep cool.	
SECTION 8: Exposu	re controls/personal	protection		
8.1. Control parameters	S			
Urea/Ammonia Assay	Kit (Rapid) (Bottle 4)			
No additional information available				
Urease (9002-13-5)				
No additional information a	vailable			
8.2. Appropriate engine	eering controls			
Appropriate engineering controls : Ensure good ventilation of the work station. Environmental exposure controls : Avoid release to the environment.				
8.3. Individual protection	on measures/Personal <mark> </mark>	protective equipment		
Hand protection:				
Protective gloves				
Туре	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	2 (> 30 minutes)		1 (< 4.0)
Eye protection:				
1				

Safety glasses

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Туре	Field of application	Characteristics
Safety glasses	Droplet	clear, With side shields
Skin and body protection:		
Wear suitable protective clothing		
Туре		
Lab coat		
Respiratory protection:		
[In case of inadequate ventilation] wear respiratory protection.		

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Color	: Liquid : Colorless
Odor	: None
Odor threshold	: No data available
рН	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor 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
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: 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.

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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		
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	: Not classified	
Respiratory or skin sensitization	: May cause an allergy or asthma symptoms or breathing difficulties if inhaled.	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	
Urease (9002-13-5)		
STOT-single exposure	May cause respiratory irritation.	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
Viscosity, kinematic	: No data available	
Symptoms/effects after inhalation	: May cause an allergy or asthma symptoms or breathing difficulties if inhaled.	

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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	

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.5. Other adverse effects

No additional information available

13.1. Disposal methods	
Naste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
SECTION 14: Transport information	
n accordance with DOT / TDG / IMDG / IATA	
14.1. UN number	
DOT NA No JN-No. (TDG) JN-No. (IMDG) JN-No. (IATA)	 Not applicable Not applicable Not applicable Not applicable Not applicable
14.2. UN proper shipping name	
Proper Shipping Name (DOT) Proper Shipping Name (TDG) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	 Not applicable Not applicable Not applicable Not applicable
14.3. Transport hazard class(es)	
DOT Fransport hazard class(es) (DOT)	: Not applicable
TDG Transport hazard class(es) (TDG)	: Not applicable
MDG Transport hazard class(es) (IMDG)	: Not applicable
ATA Transport hazard class(es) (IATA)	: Not applicable
14.4. Packing group	
Packing group (DOT) Packing group (TDG) Packing group (IMDG) Packing group (IATA)	 Not applicable Not applicable Not applicable Not applicable
14.5. Environmental hazards	
Other information	: No supplementary information available.
14.6. Special precautions for user	
DOT Not applicable	

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IMDG

Not applicable

ΙΑΤΑ

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	J	Commercial status	Flags
Urease	9002-13-5	Not present	-	

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

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SECTION 1: Identification

1.1. Identification	
Product form Product name Product code	 Mixture Urea/Ammonia Assay Kit (Rapid) (Bottle 5) K-URAMR (Bottle 5)
1.2. Recommended use and restrictions of	on use
Use of the substance/mixture	: Use as laboratory reagent
1.3. Supplier	
Manufacturer Megazyme Bray Business Park Bray, County Wicklow, A98 YV29 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: Hazard(s) identification	
2.1. Classification of the substance or mi	xture
GHS US classification	
Not classified	
2.2. GHS Label elements, including preca	nutionary statements
GHS US labeling No labeling applicable	
2.3. Other hazards which do not result in	classification
No additional information available	
2.4. Unknown acute toxicity (GHS US)	
No additional information available	
OFOTION 2. Commencition Information	
SECTION 3: Composition/Information 3.1. Substances	n on ingredients

Not applicable

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of HazCom 2012

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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/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishing	j media
Suitable extinguishing media	: Water spray. Dry powder. Foam.
5.2. Specific hazards arising from the chem	lical
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Special protective equipment and preca	autions for fire-fighters
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	res
6.1. Personal precautions, protective equip	ment 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	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.

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SECTION 7: Handlin	g and storage				
7.1. Precautions for sa	fe handling				
Precautions for safe handlin Hygiene measures	:	Ensure good ventilation of the w Do not eat, drink or smoke wher product.		• •	
7.2. Conditions for safe	e storage, including any	/ incompatibilities			
Storage conditions	:	Store in a well-ventilated place.	Keep cool.		
SECTION 8: Exposu	re controls/personal	protection			
8.1. Control parameters	s				
Urea/Ammonia Assay	Kit (Rapid) (Bottle 5)				
No additional information a					
8.2. Appropriate engine	eering controls				
Appropriate engineering cor		Ensure good ventilation of the w	ork station.		
Environmental exposure co		Avoid release to the environmer			
8.3. Individual protection	on measures/Personal p	protective equipment			
Hand protection:					
Protective gloves					
Туре	Material	Permeation	Thickness (m	m)	Penetration
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)			2 (< 1.5)
Eye protection:		1	1		<u></u>
Safety glasses					
Туре		Field of application		Characteristic	S
Safety glasses		Dust		clear, With side	e shields
Skin and body protection	1:	1		1	
Wear suitable protective cl	othing				
Туре					
Lab coat					
Respiratory protection:					
	lation, wear suitable respirate	ory equipment			
Personal protective equin	ment symbol(s):				



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SECTION 9: Physical and chemical p	broperties
9.1. Information on basic physical and ch	hemical properties
Physical state	: Solid
Color	: Colorless
Odor	: None
Odor threshold	: No data available
рН	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor 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
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available

: No data available

9.2. Other information

Oxidizing properties

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.

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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
Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitization	:	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
Viscosity, kinematic	:	Not applicable

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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. Other adverse effects	
No additional information available	
SECTION 13: Disposal considerations	;
12.1 Disposal methods	

13.1. Disposal methods

Waste treatment methods

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

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

DOT NA No	
UN-No. (TDG)	
UN-No. (IMDG)	
UN-No. (IATA)	

: Not applicable : Not applicable

- : Not applicable
 - : Not applicable

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14.2. UN proper shipping name	
Proper Shipping Name (DOT) Proper Shipping Name (TDG) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	 Not applicable Not applicable Not applicable Not applicable
14.3. Transport hazard class(es)	
DOT Transport hazard class(es) (DOT)	: Not applicable
TDG Transport hazard class(es) (TDG)	: Not applicable
IMDG Transport hazard class(es) (IMDG)	: Not applicable
IATA Transport hazard class(es) (IATA)	: Not applicable
14.4. Packing group	
Packing group (DOT) Packing group (TDG) Packing group (IMDG) Packing group (IATA)	 Not applicable Not applicable Not applicable Not applicable Not applicable
14.5. Environmental hazards	
Other information	: No supplementary information available.
	: No supplementary information available.
Other information	: No supplementary information available.
Other information 14.6. Special precautions for user DOT	: No supplementary information available.
Other information 14.6. Special precautions for user DOT Not applicable TDG	: No supplementary information available.
Other information 14.6. Special precautions for user DOT Not applicable TDG Not applicable IMDG	: No supplementary information available.
Other information 14.6. Special precautions for user DOT Not applicable IMDG Not applicable IATA	
Other information 14.6. Special precautions for user DOT Not applicable IMDG Not applicable IATA Not applicable	
Other information 14.6. Special precautions for user DOT Not applicable TDG Not applicable IMDG Not applicable IATA Not applicable 14.7. Transport in bulk according to Annee	

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Urea/Ammonia Assay Kit (Rapid) (Bottle 5)		Not present	-	

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15.2. International regulations
CANADA No additional information available
EU-Regulations No additional information available
National regulations No additional information available
15.3. US State regulations
No additional information available

SECTION 16: Other information

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