Safety Data Sheet (SDS)

Created: December 15 2022

(First Edition)

1. CHEMICAL PRODUCT AND COMPANY INDENTIFICATION

Product Name	Measure GGT (Reagent 1)
Company name, address and phone number Emmergency number Recommended usage and restrictions in usage	UMA Co., Ltd 2-19-6, Yokosuka, Matsudo, Chiba-ken, 2700-0031, JAPAN Phone: (+81) 47-710-4871 FAX: (+81) 47-710-4872 For the measurement of γ-glutamyl Transferase <i>in vitro</i> Never use other instruments than UMA Co. Ltd designated instruments.

2. SUMMARY OF HAZARDS

GHS Classification

No data

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance or Mixture:

Mi	xture
•	Tris (CAS: 77-86-1) buffer

-		
•	Glycylglycine (CAS: 556-50-3)	2.7%
•	NaCl	0.5%
•	Bioace	0.01%

4. FIRST AID MEASURES

Inhalation	Remove to fresh air. If symptoms persist, call a physician.
Skin contact	Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

5. FIRE FIGHTING MEASURES

Extinguishing Media	There is no fear of ignition and combustion.
Extinguishing Media Not to be Uesd	No information
Special Firefighting Method	No information
Specific Hazards	No information
Protection of Firefighters	Firefighting is done from the windward, avoid steam, the inhalation of smoke. Wear personal protective equiment.

6. ACCIDENTAL RELEASE MEASURES

Precautions for Human health, Protective Equiment and Emmergency Measures	During work, wear protective equiment.
Environmental Precautions	Leakage has been the product is discharged into river and the like, be careful not to cause damage to the environment.
Recovery/Neutralization	The leaked liquid is recovered as much as possible, and the rest will be incinerated by absorbing cloth, in rag and the like. Not be recoverable liquid, wash away thoroughly diluted with plenty of water.

7. PRECAUTION IN HANDLING AND STORAGE

Handling	
Technical Measures	Wear protective equiment to avoid contact with eyes, skin and clothing.
Precautions	Avoid accidentally swallowing. Wash thoroughly your hands and face after handling. Tumble the container, do not handle it roughly, such as dropping it or applying an impact.
Precautions for safe handling	Do not eat or drink when using. Avoid contact with skin, eyes and nose. Wash thoroughly your hands and face after handling.

Storage

Storage conditions

Avoiding storing in direct sunlight and fire condition.

8. EXPOSURE CONTROLS AND PROTECTION MEASURES

Facility measure	Not set
Control concentration	Not set
Exposure Equiment	Not set
Equiment measures	Install a hand-washing facility nearby and clearly display its location.
Protective Equiment	
Respiratory Protection	Protective Mask
Hand Protection	Protective Glove
Eyes Protection	Protective Goggles
Skin and Body Protection	Protective Boots, Protective Clothing, Rubber Apron as need

9. PHYSICAL AND CHEMICAL PROPERTY

Physical state	Liquid
Color	Colorless clear liquid
Smell	No odor
Melting point/freezing point	No data
Boiling point or initial boiling point and boiling point range	No data
Flammable	Nonflammable
Lower explosive limit/upper explosive limit	Not applicable
Flash point	Nonflammable
Spontaneous ignition point	Not applicable
Decomposition temperature	Not applicable
рН	8.10
Kinematic viscosity	No data
Evaporation rate	No data
Solubility	Easily souble in water
Vapour pressure	No data
Density or ralative density	No data
Relative gas density	No data
Particle characteristics	Not applicable

10. STABILITY AND REACTIVITY

Chemical stability	Stable in normal handling
Reactivity	Non-reactive under normal handling
Possibility of dangerous adverse reactions	
Dangerous polymerization	No dangerous polymerization reaction occurs
Condition to avoid	Freeze, heat, sunlight
Dangerous subtances to touch	Nothing in particular
Hazardous decomposition product	Strong oxidizers, acids, bases, heavy metals

11. TOXICOLOGICAL INFORMATION

There is no data as product (the following information is reported with contained ingredients) Hazardous substance 1: Sodium Hydroxyde

Acute Toxicity (larva)	No data
Skin Corrosion and Irritation	Same as above
Severe Eye Damage and Eye Irritation	Same as above
Specific target organ toxicity (single exposure)	Same as above
12. ENVIRONMENT HAZARDS	

No data as product

13. DISPOSAL CONSIDERRATIONS

Contaminated Container and Package Container should be cleaned and recycled, or property	
disposed of in accordance with revelant regulations and loc government standards. When disposing of empty containers, completely remove residues retained in the containers.	31

14. TRANSPORT CONSIDERATIONS

International rules	None
Domestic rules	None
Specific safety measures and conditions for transportation	Avoid direct sunlight and transport at 2 – 8°C. Avoid falling, dropping, and sideways to prevent collapse of the load.

15. APPLICABLE LAWS AND REGULATIONS

Poisonous and Detelerious Substitution Control Law	N/A
Occupational Safety and Health Act	N/A
Act on Promotion of Control of Chemical Substance Emissions Management	N/A
Other hydro pollution control method	N/A
Pharmaceutical Affairs Law	In Vitro Diagnosis

16. OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lose profit or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

Safety Data Sheet (SDS)

Created: December 15 2022

(First Edition)

1. CHEMICAL PRODUCT AND COMPANY INDENTIFICATION

Product Name	Measure GGT (Reagent 2)	
Company name, address and phone number Emmergency number Recommended usage and restrictions in usage	UMA Co., Ltd 2-19-6, Yokosuka, Matsudo, Chiba-k Phone: (+81) 47-710-4871 FAX: (+8 For the measurement of y-glutamyl Never use other instruments than U instruments.	81) 47-710-4872 Transferase <i>in vitro</i>
2. SUMMARY OF HAZARDS		
GHS Classification		
 Hazardous substance 1: Pr 	oClin 300	0.02%
Classification of the substance or mixtu	re	
Skin corrosion/irritation		Category 1
Serious eye damage/eye irritation		Category 1
Specific target organ toxicity (single exposure)		Category 1
Aquatic environment (acute hazard) Category 3		Category 3
Hazard statements		
 H314 - Causes severe skin burns and eye damage 		
 H318 - Causes serious eye damage 		
 H370 - Causes damage to organs 		

H402 - Harmful to aquatic life

Precautionary statements - (Prevention)

- Do not breathe dust/fume/gas/mist/vapors/spray
- Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection
- Do not eat, drink or smoke when using this product
- Avoid release to the environment

Precautionary statements - (Response)

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Immediately call a POISON CENTER or doctor/physician
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with wash contaminated clothing before reuse.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF SWALLO WED: Rinse mouth. DO NOT induce vomiting.

Precautionary statements - (Storage)

Store locked up.

Precautionary statements - (Disposal)

Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance or Mixture: Mixture

- y-Glutamyl-3-carboxy-4-nitroanilide (GLUPA-C) (CAS: 7300-59-6)
- MES Buffer
 0.4%
- ProClin 300 0.02%
- Bioace 0.06%

4. FIRST AID MEASURES		
Inhalation	Remove to fresh air. If symptoms persist, call a physician.	
Skin contact	Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.	
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.	
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.	

5. FIRE FIGHTING MEASURES

Extinguishing Media	There is no fear of ignition and combustion.
Extinguishing Media Not to be Uesd	No information
Special Firefighting Method	No information
Specific Hazards	No information
Protection of Firefighters	Firefighting is done from the windward, avoid steam, the inhalation of smoke. Wear personal protective equiment.
6. ACCIDENTAL RELEASE MEASURES	
Precautions for Human health, Protective Equiment and Emmergency Measures	During work, wear protective equiment.
Environmental Precautions	Leakage has been the product is discharged into river and the like, be careful not to cause damage to the environment.
Recovery/Neutralization	The leaked liquid is recovered as much as possible, and the rest will be incinerated by absorbing cloth, in rag and the like. Not be recoverable liquid, wash away thoroughly diluted with plenty of water.

7. PRECAUTION IN HANDLING AND STORAGE

Handling Technical Measures	Wear protective equiment to avoid contact with eyes, skin and clothing.
Precautions	Avoid accidentally swallowing. Wash thoroughly your hands and face after handling. Tumble the container, do not handle it roughly, such as dropping it or applying an impact.
Precautions for safe handling	Do not eat or drink when using. Avoid contact with skin, eyes and nose. Wash thoroughly your hands and face after handling.
Storage Storage conditions	Avoiding storing in direct sunlight and fire condition.

8. EXPOSURE CONTROLS AND PROTECTION MEASURES

Facility measure	Not set
Control concentration	Not set
Exposure Equiment	Not set
Equiment measures	Install a hand-washing facility nearby and clearly display its location.
Protective Equiment	
Respiratory Protection	Protective Mask
Hand Protection	Protective Glove
Eyes Protection	Protective Goggles
Skin and Body Protection	Protective Boots, Protective Clothing, Rubber Apron as need

9. PHYSICAL AND CHEMICAL PROPERTY

Physical state	Liquid
Color	Slightly yellow liquid
Smell	Slightly alcohol odor
Melting point/freezing point	No data
Boiling point or initial boiling point and boiling point range	No data
Flammable	Nonflammable
Lower explosive limit/upper explosive limit	Not applicable
Flash point	Nonflammable
Spontaneous ignition point	Not applicable
Decomposition temperature	Not applicable
рН	6.0
Kinematic viscosity	No data
Evaporation rate	No data
Solubility	Easily souble in water
Vapour pressure	No data
Density or ralative density	No data
Relative gas density	No data
Particle characteristics	Not applicable

10. STABILITY AND REACTIVITY

Chemical stability	Stable in normal handling
Reactivity	Non-reactive under normal handling
Possibility of dangerous adverse reactions	
Dangerous polymerization	No dangerous polymerization reaction occurs
Condition to avoid	Freeze, heat, sunlight
Dangerous subtances to touch	Nothing in particular
Hazardous decomposition product	Strong oxidizers, acids, bases, heavy metals

11. TOXICOLOGICAL INFORMATION

There is no data as product (the following information is reported with contained ingredients) Hazardous substance 1: Sodium Hydroxyde

Acute Toxicity (larva)	No data
Skin Corrosion and Irritation	Same as above
Severe Eye Damage and Eye Irritation	Same as above
Specific target organ toxicity (single exposure)	Same as above

12. ENVIRONMENT HAZARDS

No data as product

13. DISPOSAL CONSIDERRATIONS

Residual Wastes	When discharging, dilute with a large amount of water and discharge
Contaminated Container and Package	Container should be cleaned and recycled, or property disposed of in accordance with revelant regulations and local government standards. When disposing of empty containers, completely remove residues retained in the containers.

14. TRANSPORT CONSIDERATIONS

International rules	None
Domestic rules	None
Specific safety measures and	Avoid direct sunlight and transport at 2 – 8°C. Avoid falling,
conditions for transportation	dropping, and sideways to prevent collapse of the load.

15. APPLICABLE LAWS AND REGULATIONS

Poisonous and Detelerious Substitution Control Law	N/A
Occupational Safety and Health Act	N/A
Act on Promotion of Control of Chemical Substance Emissions Management	N/A
Other hydro pollution control method	N/A
Pharmaceutical Affairs Law	In Vitro Diagnosis

16. OTHER INFORMATION

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