

Safety Data Sheet (SDS)

Created: December 15 2022

(First Edition)

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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





2. SUMMARY OF HAZARDS**GHS Classification**

- Hazardous substance 1: Sodium Azide

Classification of the substance or mixture

Acute toxicity – Oral	Category 2
Acute toxicity – Dermal	Category 1
Skin corrosion/irritation	Category 1C
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1
Aquatic environment (acute hazard)	Category 1
Aquatic environment (long-term hazard)	Category 1

Pictograms

			
Corrosive	Health Hazard	Acute Toxicity	Environment Hazard

Hazard statements

- H314 - Causes severe skin burns and eye damage
- H318 - Causes serious eye damage
- H300 - Fatal if swallowed H310 - Fatal in contact with skin
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects
- H370 - Causes damage to the following organs: cardiovascular system, central nervous system, lung, systemic toxicity
- H372 - Causes damage to the following organs through prolonged or repeated exposure cardiovascular system, central nervous system, liver

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 SWALLOWED: Rinse mouth. DO NOT induce vomiting.

Precautionary statements - (Storage)

- Store locked up.

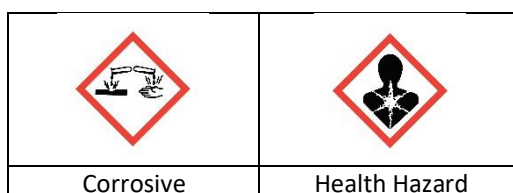
Precautionary statements - (Disposal)

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

- Hazardous substance 2: Sodium Hydroxide

Classification of the substance or mixture

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

Pictograms**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 SWALLOWED: 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

Constituent reagent name	Chemical name	Weight (%)	ENCS	ISHL No.	CAS No.
R-1	Sodium Azide	0.095	(1)-482	N/A	26628-22-8

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 Used	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 equipment.

6. ACCIDENTAL RELEASE MEASURES

Precautions for Human health, Protective Equipment and Emergency Measures	During work, wear protective equipment.
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 equipment 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.
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8. EXPOSURE CONTROLS AND PROTECTION MEASURES

Facility measure	Not set
Control concentration	Not set
Exposure Equipment	Not set
Equipment measures	Install a hand-washing facility nearby and clearly display its location.
Protective Equipment	
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
Smell	No data
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
pH	6.43 – 6.63 (20°C)
Kinematic viscosity	No data
Evaporation rate	No data
Solubility	Easily soluble in water
Vapour pressure	No data
Density or relative 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	No data
Dangerous substances to touch	Nothing in particular
Hazardous decomposition product	No data

11. TOXICOLOGICAL INFORMATION

There is no data as product (the following information is reported with contained ingredients)

Hazardous substance 1: Sodium Azide

Acute toxicity (lung)	Rat: LD50 45 mg/kg, Mouse: LD50 27 – 45 mg/kg
Acute toxicity (larva)	Rabbit: LD50 20 mg/kg
Skin corrosion/irritation	Rabbit: Roughness reported in 4hrs to the eyes
Serious damage/irritation	It is inferred from skin rust and irritation
Specific target organ (single exposure)	Knowledge of effects on respiratory/gastrointestinal etc.
Specific target organ (repeated exposure)	Knowledge of effects on the liver in animal experiments.

Hazardous substance 2: Sodium Hydroxyde

Acute Toxicity (larva)	Rabbit, LD 50 325 mg/kg
Skin Corrosion and Irritation	Human: 0.5% or more, pigs: more than 8& rotten, rabbit: 5% 4h severe necrosis
Severe Eye Damage and Eye Irritation	It causes serious damage to human eyes. Rabbit: rotted by 1.2% or more
Specific target organ toxicity (single exposure)	Irregularities that cause pulmonary edema by stimulating the respiratory tract.

12. ENVIRONMENT HAZARDS

No data as product

13. DISPOSAL CONSIDERATIONS

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 relevant 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 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	Copper
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)

17. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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

18. SUMMARY OF HAZARDS**GHS Classification**

- Hazardous substance: Copper(II) Sulfate Pentahydrate

Classification of the substance or mixture

Acute toxicity – Oral	Category 4
Skin sensitization	Category 1
Skin corrosion/irritation	Category 2
Germ cell mutagenicity	Category 2
Reproductive Toxicity	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1, 2
Aquatic environment (acute hazard)	Category 1
Aquatic environment (long-term hazard)	Category 1

Pictograms

		
Harmful	Health Hazard	Environment Hazard

Hazard statements

- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H302 - Harmful if swallowed
- H341 - Suspected of causing genetic defects
- H361 - Suspected of damaging fertility or the unborn child
- H317 - May cause an allergic skin reaction
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects
- H370 - Causes damage to the following organs: circulatory system, heart, kidneys, liver, nervous system, respiratory system
- H372 - Causes damage to the following organs through prolonged or repeated exposure: circulatory system, kidneys, respiratory system
- H373 - May cause damage to the following organs through prolonged or repeated exposure: liver

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 SWALLOWED: 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.

19. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance or Mixture: Mixture

Constituent reagent name	Chemical name	Weight (%)	ENCS	ISHL No.	CAS No.
R-2	Sodium Hydroxide	7.3	(1)-410	N/A	1310-73-2
R-2	Copper(II) Sulfate Pentahydrate	0.749	(1)-300	N/A	7758-99-8

20. 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.

21. FIRE FIGHTING MEASURES

Extinguishing Media	There is no fear of ignition and combustion.
Extinguishing Media Not to be Used	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 equipment.

22. ACCIDENTAL RELEASE MEASURES

Precautions for Human health, Protective Equipment and Emergency Measures	During work, wear protective equipment.
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.

23. PRECAUTION IN HANDLING AND STORAGE

Handling

Technical Measures	Wear protective equipment 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.
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24. EXPOSURE CONTROLS AND PROTECTION MEASURES

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

25. PHYSICAL AND CHEMICAL PROPERTY

Physical state	Liquid
Color	Blue
Smell	No data
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
pH	No data
Kinematic viscosity	No data
Evaporation rate	No data
Solubility	Easily soluble in water
Vapour pressure	No data
Density or relative density	No data
Relative gas density	No data
Particle characteristics	Not applicable

26. 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	No data
Dangerous substances to touch	Nothing in particular
Hazardous decomposition product	No data

27. TOXICOLOGICAL INFORMATION

There is no data as product (the following information is reported with contained ingredients)

Hazardous substance: Copper(II) Sulfate Pentahydrate

Acute toxicity (lung)	Rat: LD50 960 mg/kg
Acute toxicity (larva)	Rat: LD50 > 2000 mg/kg
Skin corrosion/irritation	Emergence/pain (degree of stimulation unknown)
Serious damage/irritation	Pain, blurred vision (degree of stimulation unknown)
Skin sensitization	Knowledge of classification as sensitizer
Specific target organ (single exposure)	Knowledge of effects on respiratory, kidney, nervous system, liver and liver system.
Specific target organ (repeated exposure)	Knowledge of effects on respiratory, kidney, nervous system, liver and liver system.

28. ENVIRONMENT HAZARDS

No data as product

29. DISPOSAL CONSIDERATIONS

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

30. 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.

31. 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	Copper
Pharmaceutical Affairs Law	In Vitro Diagnosis

32. 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.
