

Code : E1400                      MSDS No. : MSDS-Prep Buffer A-E-00

Issue date: 2022/2/14

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**MATERIAL SAFETY DATA SHEET**

IDENTITY: Prep Buffer A

**1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER**

PRODUCT NAME : Prep Buffer A  
 MANUFACTURER : Precision System Science Co.,Ltd.  
 Address : 88, Kamihongou, Matsudo-shi, Chiba 271-0064 JAPAN  
 Telephone Number :  
 For Information : +81-47-303-4801  
 Emergency : +81-47-303-4800  
 E-Mail : service@pss.co.jp  
 MSDS No. : MSDS-Prep Buffer A-E-00

**2. HAZARDS IDENTIFICATION**

REAGENT NAME	SINGLE/MIXTURE	GHS CLASSIFICATION			
		Class	Category	Symbol	H-Code
Prep Buffer A	Mixture	Acute toxicity (oral)	4		H302
		Skin corrosion/ irritation	2		H315
		Serious eye damage / eye irritation	2		H319
		Specific target organ systemic toxicity - single exposure	3		H335
		Hazardous to the aquatic environment	1		H400, H410

**SIGNAL WORD:** Danger**HAZARD STATEMENTS:**

Causes serious eye irritation  
 May cause respiratory irritation  
 Harmful if swallowed  
 Causes skin irritation

**PRECAUTIONARY STATEMENTS:**

REAGENT NAME	SINGLE/MIXTURE	P-code	Precautionary statement
Prep Buffer A	MIXTURE	P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
		P264	Wash hands thoroughly after handling.
		P270	Do not eat, drink or smoke when using this product.
		P271	Use only outdoors or in a well-ventilated area.
		P273	Avoid release to the environment.

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P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment.
P330	Rinse mouth.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P391	Collect spillage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up..
P501	Dispose of contents/container according to national regulation.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTIT	CAS No.	Content (%)	EINECS No.	TSCA (Listed or not Listed)
Guanidine Hydrochloride	50-01-1	<60%	200-002-3	Listed
Hexadecan-1-yl(trimethyl)ammonium chloride	112-02-7	0.1-5%	203-928-6	Not listed

### 4. FIRST AID MEASURES

**GENERAL ADVICE :** Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.

**INHALATION :** Move victim to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, administer artificial respiration. Maintain normal body temperature with a blanket. If irritation persists, transport to a hospital immediately.

**SKIN CONTACT :** Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.

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**EYE CONTACT :**            Remove any contact lenses at once. Flush eyes well with flooding amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.

**INGESTION :**                Rinse mouth, give plenty of water to dilute the substance. Never give anything by mouth to an unconscious person. Transport to a hospital immediately.

## 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA :**                      Carbon dioxide, dry chemical powder, alcohol resistant foam, water

**FIRE & EXPLOSION HAZARDS :**                Flammable liquid. Hazardous toxic and irritating fumes or smoke may be emitted. Vapors may travel considerable distance to ignition source and flash back.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS :** Firemen should wear normal protective equipment (full bunker gear) and positive-pressure self-contained breathing apparatus.

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## 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS :**                    Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin and eyes.

**ENVIRONMENTAL PRECAUTIONS :**            Prevent spills from entering sewers, watercourses or low areas.

**METHODS FOR CLEANING UP :**            Do not touch spilled material without suitable protection (See section 8). Take up spilled material with ashes or other absorbents. After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose of contaminated clothing.

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## 7. HANDLING AND STORAGE

**PRECAUTION FOR SAFE HANDLING :**        Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection away from source of heat or ignition and use non-sparking type tools.

**CONDITIONS FOR SAFE STORAGE :**        Store away from sunlight in well-ventilated dry place at room temperature (preferably cool place). Keep container tightly closed.

**INCOMPATIBILITIES :**                        Bases, oxidizers, reducing agents

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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ENGINEERING MEASURES :        Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.

VENTILATION :                      Local Exhaust ; Necessary, Mechanical(General) ; Recommended

INDIVIDUAL PROTECTION MEASURES ;

Respiratory protection :        Use a NIOSH/MSHA or European Standard EN149 approved respirator if the vapor concentrations exceed regulatory guidelines.

Hand protection :                Chemical resistant gloves

Eye protection :                 Safety glasses(goggles)

Skin protection :                 Protective clothing

CONTROL PARAMETER :

OSHA Final Limits :              Not available

ACGIH TLV(s) :                 Not available

## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOUR :        Plastic packaging contains clear, aqueous solutions

pH :                                 5.0-8.0

MELTING POINT :                 No data available

INITIAL BOILING POINT :         No data available

FLASH POINT :                    No data available

FLAMMABILITY (solid, gas) :     No data available

EXPLOSIVE LIMITS :              No data available

VAPOR PRESSURE :                No data available

VAPOR DENSITY :                 No data available

RELATIVE DENSITY :              No data available

SOLUBILITY IN WATER             Miscible

PARTITION COEFFICIENT :        No data available

AUTOIGNITION TEMPERATURE :   No data available

DECOMPOSITION TEMPERATURE : No data available

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## 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY :            Stable under recommended storage conditions.

CONDITIONS TO AVOID :         No data available

INCOMPATIBLE MATERIALS        Strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS : Carbon dioxides, Nitrogen oxides (NOx), Hydrogen chloride gas

## 11. TOXICOLOGICAL INFORMATION

Lysis Solution as Guanidine hydrochloride

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ACUTE TOXICITY DATA :              LD50(oral, rat): 475 mg/kg(NTIS\*\* AD-A165-747)  
   LD50(oral, mouse): 571 mg/kg(ATDAE1 12, 598, 1993)  
   LD50(ipr, mouse): 500 mg/kg(NTIS\*\* AD277-689)

IRRITATION DATA :                      Skin; rabbit; 500 mg/24H; Severe(NTIS\*\* AD-A166-306)  
   Eye; rabbit; 81,400 µg; Moderate(NTIS\*\* AD-A184-068)

MUTATION DATA :                      Mutation in microorganisms; S.cerevisiae; 4 mmol/L(BBRCA9 53, 531, 1973)

REPRODUCTIVE EFFECTS DATA :      No data available

TUMORIGENIC DATA :                    No data available

## 12. ECOLOGICAL INFORMATION

ECOTOXICITY :                            Not available

PERSISTENCE AND DEGRADABILITY :    Not available.

BIOACCUMULATION POTENTIAL :        Not available

MOBILITY IN SOIL :                      Not available

OTHER ADVERSE EFFECTS :              Not available

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## 13. DISPOSAL CONSIDERATION (INCLUDING CONTAINER)

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations (contact country, local or state environmental agency for specific rules.)

After contents are completely removed, dispose of its container at hazardous or special waste collection point. (in accordance with local/regional/national/international regulation).

## 14. TRANSPORT INFORMATION

### UN number

ADR/RID: -      IMDG: -                      IATA: -

### UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

### Transport hazard class(es)

ADR/RID: -      IMDG: -                      IATA: -

### Packaging group

ADR/RID: -      IMDG: -                      IATA: -

### Environmental hazards

ADR/RID: no      IMDG Marine pollutant: no      IATA: no

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**Special precautions for user**

No data available

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**15. REGULATORY INFORMATION**

Not available

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**16. OTHER INFORMATION INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS**

Reference

Ministry of Health, Labour, and Welfare

[https://anzeninfo.mhlw.go.jp/anzen\\_pg/GHS\\_MSD\\_FND.aspx](https://anzeninfo.mhlw.go.jp/anzen_pg/GHS_MSD_FND.aspx)

European Chemicals Bureau

<http://ecb.jrc.ec.europa.eu/>

Registry of Toxic Effects of Chemical Substances NIOSH(1985-1986)

The above information is believed to be correct to be the best of our knowledge and information but does not purport to be all inclusive and shall be used only as a guide. This product is intended to be used by expert persons having chemical knowledge and skill, at their own discretion and risk and PSS shall not be held liable for any damage resulting from handling or from contact with the above material.