### **Material Safety Data Sheet**

### 1 . Product and Company

Item Name: pH Standard Buffer Solution

Other Name: no

Item Number: AS700 pH 7.00 Buffer

Recommended use and restrictions on the use: pH Meter Correction using

The name of the manufacturer or supplier: ACCUSOLN CO., LTD.

Address and telephone No.26, Ln. 54, Nanzhong St., North Dist., Hsinchu City 300, Taiwan

(R.O.C.) (03)5424632

Emergency Contact Phone / Fax: (03)5424632 /(03)5429343

#### 2 · Hazard Identification

Object hazard classification: Acute toxicity (Swallow) Fifth grade \ Corrosion /Irritating to the skinThe third level \ Serious injury /Irritation of the eyes The SECOND level



Mark Content:

Symbol of the Province exclamation point symbol

Warnings: Warning

Hazard: May be harmful if swallowed · Causes mild skin irritation · Cause eye irritation ·

Precautionary: If contact with eyes, rinse with clean water more than 15 minutes, if still

sensory stimulation to the eye doctor should be .

Avoid skin and eye contact •

Wear suitable gloves •

Keep away from sunlight •

Placed a cool dry place •

Tightly covered container, placed in well-ventilated premises

Other hazards :-

### 3 · Component identification information

#### Pure substances:

Chinese and English name

: Phosphate pH Standard Solution neutral phosphate pH standard buffer

Synonyms: --

CAS registry number (CAS No.) : KH2PO4Potassium dihydrogen phosphate raw materials CAS registration number 7778-77-0, Na2HPO4disodium hydrogen phosphate of the registration number 7558-79-4

Composition of hazardous substances

(The percentage composition): 0.3% Potassium dihydrogen phosphate \ 0.4% Disodium hydrogen phosphate

#### Mixture:

Chemical properties:		
Composition of hazardous substances into the English	Concentration or concentration range	(CAS No.)
name	(The percentage composition)	
Potassium Dihydrogen phosphate	0.3%	7778-77-0
Disodium hydrogen phosphate	0.4%	7558-79-4

#### 4 · First aid measures

Different routes of exposure of the first aid:

Inhalation: Quiet after rinsing Insulation •

Skin contact: With plenty of water •

Eye contact: To clean water for 15 minutes, If you still feel irritation to the eye doctor should

Ingestion: When a large number of eating

- , Large amounts of lukewarm water or milk to induce vomiting
- Medical treatment and then rapidly •

The most important symptoms and hazardous effects: ---

Protection of emergency personnel

: Wear gloves to avoid contact . Eating .

Prompted by the doctor

: To give proper treatment to the injured symptoms •

## <sup>5</sup> `Fire-fighting measures

Extinguishing: Can pour the rescue °

Hazardous combustion products: NO

When Fire Hazards: NO °

Speci al fire fighting procedures: Need not °

Special protective equipment for fire fighting

#### 6 · Accidental release measures

: General fire safety equipment •

Personal precautions: Wear gloves and goggles processing •

Environmental Considerations:

Methods for cleaning up: Polyethylene containers and in accordance with waste disposal •

### 7 \ Handling and Storage

Disposal : General location ·
Store : Avoid exposure ·

# 8 ` Exposure prevention measures

Engineering controls: Set wash, watering facilities •

Biological indicators: NO

Personal protective equipment: NO

Respiratory Protection: Need not

Hand Protection: Gloves

Eye Protection: Goggle

Skin and body protection: Lab coat

Health measures: Wash your hands •

## 9 · Physical and chemical properties

Appearance (physical state, color, etc.): the	Odor: None
solution, colorless	
Odor threshold: no odor	Melting point: 0°C
pH value : 7.00(2 5°C) -	Boiling point / range: approx 100°C
Flammability (solid, gas): non-flammable	
liquids °	
Decomposition temperature: the liquid does not	Flash Point: / °F / °C
break down °	Test methods: / Open Cup / closed cup
Ignition temperature : Solution is not	Explosion: Solution does not explode •
spontaneous combustion ·	

Vapor pressure :	Vapor density :
Density: 1g/cm3	Solubility:
Octanol / water partition coefficient (log Kow):	Evaporation rate :

## 10 Stability and reactivity

Stability: Very stable •	
Special Conditions of Hazardous Reaction: None	o ans esculp testic - Kiedenbong l <b>etor</b> el
Conditions to avoid: None	
Materials to avoid: None.	fethods for creaning up - Polyebylane op
Hazardous Decomposition Products: None	

## 11 ` Toxicity Data

Route of exposure: Mouth, eyes °
Symptoms: slight eye irritation if exposed °
Acute Toxicity: No acute toxicity °
Chronic or long-term toxicity: no opinion °

# 12 · Ecological information

Ecotoxicity: Weak acid	
Persistence and degradability: biodegradable °	Payof Control of the
Bioaccumulation: not accumulate in	pipositi) — potrotmi a -
Mobility in soil: no opinion	toro de la politicatore vivad bas esta
Other adverse effects: None °	enged was device as ween distal

## 13 · Waste disposal methods

Waste disposal methods: Among the substances containing phosphorus compounds, according to science parks or industrial areas, disposal of waste water treatment requirements •

## 14 ` Transport information

UN : No number of non-management products ∘
UN shipping name: Non-management products without shipping name
Hazard Classification: Not apply to non-hazardous materials
Packing Type: drum, bottle °
Marine pollutant (yes / no): Yes
Special delivery methods and precautions: Avoid leakage ·

# 15 Regulatory information

Applicable Regulations: Occupational Safety and Health regulations, industrial waste treatment and storage facilities, standard clearance •

## 16 · Other information

References	Japan Chemical Indus	stry Co., Ltd. pharmacological material safety data	
Watch those	Name : ACCUSOLN CO.,LTD.		
units	ADD AND TEL:No.26, Ln. 54, Nanzhong St., North Dist., Hsinchu City 300,		
	Taiwan (R.O.C.) (03)5424632		
	÷	·	
Lister	Title: Business	name:Huang wen jui	
	Manager		
Date of issue	2011.11.01		
Note: The above data "-" indicates no data or not applicable ·			

REV:G EM-0700-04B



### **Material Safety Data Sheet**

### 1. Product and Company

Item Name: PH Standard Buffer Solution

Other Name: no

Item Number: AS401 pH 4.01 Buffer

Recommended use and restrictions on the use: pH Meter Correction using

The name of the manufacturer or supplier: ACCUSOLN CO.,LTD.

Address and telephone No.26, Ln. 54, Nanzhong St., North Dist., Hsinchu City 300, Taiwan

(R.O.C.) (03)5424632

Emergency Contact Phone / Fax: (03)5424632 /(03)5429343

#### 2. Hazard Identification

Object hazard classification: Acute toxicity (Swallow) Fifth grade, Corrosion /Irritating to the skin. The third level, Serious injury / Irritation of the eyes The SECOND level



Mark Content: Symbol of the

Symbol of the Province exclamation point symbol

Warnings: Warning

Hazard: May be harmful if swallowed . Causes mild skin irritation . Cause eye irritation .

Precautionary: If contact with eyes, rinse with clean water more than 15 minutes, if still

sensory stimulation to the eye doctor should be .

Avoid skin and eye contact •

Wear suitable gloves •

Keep away from sunlight •

Placed a cool dry place •

Tightly covered container, placed in well-ventilated premises •

Other hazards :-

### 3. Component identification information

#### Pure substances:

Chinese and English name

: Phthalate pH Standard Solution phthalate pH standard solution

Synonyms: --

CAS registry number (CAS No.) : 877-24-7

Composition of hazardous substances

(The percentage composition): 1%Potassium Hydrogen Phthalate

#### Mixture:

Chemical properties:			
Composition of hazardous	Concentration or	(CAS No.)	
substances into the English	concentration range		
name	(The percentage composition)		
Potassium Hydrogen	1%	877-24-7	
Phthalate			

#### 4. First aid measures

Different routes of exposure of the first aid:

Inhalation: Quiet after rinsing Insulation

Skin contact: With plenty of water •

Eye contact: To clean water for 15 minutes, If you still feel irritation to the eye doctor should be.

Ingestion: When a large number of eating

- , Large amounts of lukewarm water or milk to induce vomiting
- , Medical treatment and then rapidly .

The most important symptoms and hazardous effects: --

Protection of emergency personnel

: Wear gloves to avoid contact . Eating .

Prompted by the doctor

: To give proper treatment to the injured symptoms •

## 5. Fire-fighting measures

Extinguishing: Can pour the rescue •

Hazardous combustion products: NO

When Fire Hazards: NO .

Speci al fire fighting procedures: Need not •

Special protective equipment for fire fighting

: General fire safety equipment •

#### 6.Accidental release measures

Personal precautions: Wear gloves and goggles processing •

**Environmental Considerations:** 

Methods for cleaning up: Polyethylene containers and in accordance with waste disposal

## 7. Handling and Storage

Disposal: General location •

Store: Avoid exposure •

### 8. Exposure prevention measures

Engineering controls: Set wash, watering facilities •

Biological indicators:NO

Personal protective equipment: NO

Respiratory Protection: Need not

Hand Protection : Gloves Eye Protection : Goggle

Skin and body protection: Lab coat

Health measures: Wash your hands •

### 9. Physical and chemical properties

Appearance (physical state, color, etc.): the	Odor: None
solution, colorless	
Odor threshold: no odor	Melting point: 0°C
pH value : 7.00(2 5°C) -	Boiling point / range: approx 100°C
Flammability (solid, gas): non-flammable	
liquids °	
Decomposition temperature: the liquid does not	Flash Point : / °F / °C
break down °	Test methods: / Open Cup / closed cup
Ignition temperature : Solution is not	Explosion: Solution does not explode °
spontaneous combustion ·	
Vapor pressure :	Vapor density :
Density: 1g/cm3	Solubility :
Octanol / water partition coefficient (log Kow):	Evaporation rate :

### 10. Stability and reactivity

Stability: Very stable •

Special Conditions of Hazardous Reaction: None

Conditions to avoid: None Materials to avoid: None.

Hazardous Decomposition Products: None

#### 11. Toxicity Data

Route of exposure: Mouth, eyes •

Symptoms: slight eye irritation if exposed •

Acute Toxicity: No acute toxicity •

Chronic or long-term toxicity: no opinion •

### 12. Ecological information

Ecotoxicity: Weak acid

Persistence and degradability: biodegradable •

Bioaccumulation: not accumulate in

Mobility in soil: no opinion

Other adverse effects: None •

## 13. Waste disposal methods

Waste disposal methods: Among the substances containing phosphorus compounds, according to science parks or industrial areas, disposal of waste water treatment requirements •

### 14. Transport information

UN: No number of non-management products •

UN shipping name: Non-management products without shipping name

Hazard Classification: Not apply to non-hazardous materials

Packing Type: drum, bottle •

Marine pollutant (yes / no): Yes

Special delivery methods and precautions: Avoid leakage •

### 15. Regulatory information

Applicable Regulations: Occupational Safety and Health regulations, industrial waste treatment and storage facilities, standard clearance °

## 16. Other information

References	Japan Chemical Indus	stry Co., Ltd. pharmacological material safety data
Watch those	Name : ACCUSOLN CO.,LTD.	
units	ADD AND TEL:No.26, Ln. 54, Nanzhong St., North Dist., Hsinchu City 300,	
	Taiwan (R.O.C.) (03)5424632	
Lister	Title: Business	name:Huang wen jui
	Manager	
Date of issue	2011.11.01	
Note: The above data "-" indicates no data or not applicable °		

REV:G

EM-0700-04B



### **Material Safety Data Sheet**

### 1 . Product and Company

Item Name: PH Standard Buffer Solution

Other Name: no

Item Number:AS1000—pH 10.00 Buffer

Recommended use and restrictions on the use : pH Meter Correction using

The name of the manufacturer or supplier: ACCUSOLN CO.,LTD.

Address and telephone No.26, Ln. 54, Nanzhong St., North Dist., Hsinchu City 300, Taiwan

(R.O.C.) (03)5424632

Emergency Contact Phone / Fax: (03)5424632 /(03)5429343

#### 2 · Hazard Identification

Object hazard classification: Acute toxicity (Swallow) Fifth grade · Corrosion /Irritating to the skinThe third level · Serious injury /Irritation of the eyes The SECOND level



Mark Content: Symbol of the Province exclamation point symbol

Warnings: Warning

Hazard: May be harmful if swallowed . Causes mild skin irritation . Cause eye irritation .

Precautionary: If contact with eyes, rinse with clean water more than 15 minutes, if still

sensory stimulation to the eye doctor should be  $^{\circ}$ 

Avoid skin and eye contact •

Wear suitable gloves °

Keep away from sunlight •

Placed a cool dry place •

Tightly covered container, placed in well-ventilated premises  $^{\circ}$ 

Other hazards :-

### 3 · Component identification information

#### Pure substances:

Chinese and English name

: Carbonate pH Standard Solution

Synonyms: --

CAS registry number (CAS No.) : Na2CO3 CAS registration number497-19-8,NaHCO3 CAS registration number144-55-8

Composition of hazardous substances

(The percentage composition): 0.27% Na2CO3 \ 0.21% NaHCO3

#### Mixture:

Chemical properties:			
Composition of hazardous substances into the English	Concentration or concentration range	(CAS No.)	
name	(The percentage composition)		
Na2CO3	0.27%	497-19-8	
NaHCO3	0.21%	144-55-8	

#### 4 · First aid measures

Different routes of exposure of the first aid:

Inhalation: Quiet after rinsing Insulation

Skin contact: With plenty of water •

Eye contact : To clean water for 15 minutes  $^{,}$  If you still feel irritation to the eye doctor should be  $^{\circ}$ 

Ingestion: When a large number of eating

- , Large amounts of lukewarm water or milk to induce vomiting
- Medical treatment and then rapidly •

The most important symptoms and hazardous effects: --

Protection of emergency personnel

: Wear gloves to avoid contact . Eating .

Prompted by the doctor

: To give proper treatment to the injured symptoms •

### <sup>5</sup> `Fire-fighting measures

Extinguishing: Can pour the rescue •

Hazardous combustion products: NO

When Fire Hazards: NO .

Speci al fire fighting procedures: Need not °

Special protective equipment for fire fighting

: General fire safety equipment •

## 6 · Accidental release measures

Personal precautions: Wear gloves and goggles processing •

Environmental Considerations:

Methods for cleaning up: Polyethylene containers and in accordance with waste disposal

## 7 \ Handling and Storage

Disposal: General location •

Store: Avoid exposure •

## 8 ` Exposure prevention measures

Engineering controls: Set wash, watering facilities

Biological indicators:NO

Personal protective equipment : NO

Respiratory Protection: Need not

Hand Protection : Gloves Eye Protection : Goggle

Skin and body protection: Lab coat

Health measures: Wash your hands -

## 9 ' Physical and chemical properties

Appearance (physical state, color, etc.): the	Odor: None
solution, colorless	
Odor threshold: no odor	Melting point: 0°C
pH value : 7.00(2 5°C) ∘	Boiling point / range: approx 100°C
Flammability (solid, gas): non-flammable	
liquids °	
Decomposition temperature: the liquid does not	Flash Point: / °F / °C
break down °	Test methods: / Open Cup / closed cup
Ignition temperature : Solution is not	Explosion: Solution does not explode °
spontaneous combustion ·	
Vapor pressure :	Vapor density:
Density: 1g/cm3	Solubility:
Octanol / water partition coefficient ( log Kow ):	Evaporation rate :

### 10 Stability and reactivity

Stability: Very stable •

Special Conditions of Hazardous Reaction: None

Conditions to avoid: None

Materials to avoid: None.

Hazardous Decomposition Products: None

#### 11 . Toxicity Data

Route of exposure: Mouth, eyes °

Symptoms: slight eye irritation if exposed °

Acute Toxicity: No acute toxicity •

Chronic or long-term toxicity: no opinion •

### 12 ` Ecological information

Ecotoxicity: Weak acid

Persistence and degradability: biodegradable •

Bioaccumulation: not accumulate in

Mobility in soil: no opinion

Other adverse effects: None •

## 13 · Waste disposal methods

Waste disposal methods: Among the substances containing phosphorus compounds, according to science parks or industrial areas, disposal of waste water treatment requirements •

### 14 \ Transport information

UN: No number of non-management products •

UN shipping name: Non-management products without shipping name

Hazard Classification: Not apply to non-hazardous materials

Packing Type: drum, bottle •

Marine pollutant (yes / no): Yes

Special delivery methods and precautions: Avoid leakage •

## 15 Regulatory information

Applicable Regulations: Occupational Safety and Health regulations, industrial waste treatment and storage facilities, standard clearance •

## 16 · Other information

References	Japan Chemical Indus	stry Co., Ltd. pharmacological material safety data
Watch those	Name : ACCUSOLN CO.,LTD.	
units	ADD AND TEL:No.26, Ln. 54, Nanzhong St., North Dist., Hsinchu City 300, Taiwan (R.O.C.) (03)5424632	
Lister	Title: Business Manager	name : Huang wen jui
Date of issue	2011.11.01	
Note: The above data "-" indicates no data or not applicable °		

**REV:G** 

EM-0700-04B

