

# SAFETY DATA SHEET



Conforms to regulation (EC) no. EU 453/2010

## SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product Identifier

**Product Name:** Mirskys Fixative Buffer Concentrate

**Product Number:** HS-102A

### 1.2 Relevant Identified Uses of the Substance/Mixture and Uses Advised Against

Investigational research by professional users

### 1.3 Details of the Supplier of the Safety Data Sheet

#### Manufacturer

National Diagnostics  
305 Patton Drive  
Atlanta, GA 30036  
(404) 699-2121  
(800) 526-3867  
info@nationaldiagnostics.com

### 1.4 Emergency Telephone Number

#### ChemTel Inc.

Contract number MIS8894340  
1-800 255-3924 (United States, Canada, Puerto Rico & US Virgin Islands)  
01-800-099-0731 (Mexico)  
400-120-0751 (China)  
000-800-100-4086 (India)  
1-300-954-583 (Australia)  
0-800-591-6042 (Brazil)  
+1-813-255-3924 (All other regions)

## SECTION 2 - HAZARDS IDENTIFICATION

### 2.1 Classification of the Substance or Mixture

Not a hazardous substance or mixture according to regulation (EC) No. 1272/2008.

### 2.2 Label Elements

This product has no labeling elements associated with EC directives or respective national laws.

### 2.3 Other Hazards

None found.

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixture

#### Chemical Names/Description

Aqueous solution of dipotassium phosphate. All other ingredients less than 1% respectively.

#### Component List

Component	% Comp.	CAS #	EC #	1278/2008 Classification
Dipotassium Phosphate	10 - 15	7758-11-4	231-834-5	N.A.

## SECTION 4 - FIRST AID MEASURES

### 4.1 Description of First Aid Measures

#### Inhalation

Remove to fresh air. Get medical attention for any breathing difficulty.

#### Ingestion

If swallowed, give several glasses of water to drink to dilute. If large amounts were swallowed or symptoms occur, get medical advice. Never give anything by mouth to an unconscious person.

#### Skin

Wash exposed area with soap and water. Get medical advice if irritation develops.

#### Eyes

Wash thoroughly with running water. Get medical advice if irritation develops.

### 4.2 Most Important Symptoms and Effects, Both Acute and Delayed

#### Inhalation

Not expected to be a health hazard by inhalation.

### **Ingestion**

Symptoms may include vomiting, lethargy, diarrhea, blood chemistry effects, cardiac effects and central nervous system effects.

### **Skin**

No adverse effects expected.

### **Eyes**

Pain and redness.

## **4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed**

Unknown/not applicable

## **SECTION 5 - FIRE FIGHTING MEASURES**

### **5.1 Extinguishing media**

Use media appropriate to the primary cause of fire.

### **5.2 Special Hazards Arising from the Substance/Mixture**

#### **Hazardous Combustion Products**

N.A.

#### **Hazardous Decomposition Products**

Phosphorus oxides may form when heated to decomposition.

#### **Hazardous Polymerization**

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

### **5.3 Advice for Firefighters**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

### **5.4 Further Information**

No data available.

## **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal Precautions**

Wear appropriate protective equipment as specified in Section 8.

### **6.2 Environmental Precautions**

Prevent discharge into the environment. Dike spills and stop leakage where practical. Do not allow material to enter drains.

### **6.3 Methods and Materials for Containment and Cleaning Up**

Contain and clean up spill immediately, prevent from entering floor drains. Contain liquids using absorbents. Shovel all spill materials into disposal drum. Scrub spill area with detergent, flush with copious amounts of water.

### **6.4 References to Other Sections**

For disposal information, see Section 13. For protective clothing and equipment, see Section 8.

## **SECTION 7 - HANDLING AND STORAGE**

### **7.1 Precautions for Safe Handling**

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

### **7.2 Conditions for Safe Storage (including any incompatibles)**

Keep in a tightly closed container, stored in a cooled, dry, ventilated area.

#### **Incompatibles**

No incompatibility data found.

### **7.3 Specific End Uses**

Investigational research by professional users

## **SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS**

### **8.1 Control Parameters**

ACGIH Threshold Limit Value (TLV): 10 mg/m<sup>3</sup> total dust

OSHA Permissible Exposure Limit (PEL): 15 mg/m<sup>3</sup> total dust

### **8.2 Exposure Controls**

#### **Engineering Controls**

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source.

### Respiratory Protection

For conditions of use where exposure to the dust or mist is apparent, a full-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator.

### Eye Protection

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

### Skin Protection

Wear protective gloves and clean body covering clothing.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on Basic Physical & Chemical Properties

a. Appearance	Clear, colorless solution	b. Odor	None
c. Odor Threshold	None	d. pH	7.5 - 8.3
e. Melting/Freezing Point (°C)	-3	f. Boiling point (°C)	104
g. Flash Point (°C)	N.A.	h. Evaporation Rate	N.A.
i. Flammability	N.A.	j. Upper/Lower Flammability or Explosive Limits	N.A.
k. Vapor Pressure	17 mmHg @ 20C	l. Vapor Density (Air = 1)	N.A.
m. Relative Density	1.0	n. Water Solubility	Soluble
o. Partition Coefficient n-octanol/water	Mixture	p. Autoignition Temperature (°C)	N.A.
q. Decomposition Temperature (°C)	N.A.	r. Viscosity	No data available.
s. Explosive Properties	N.A.	t. Oxidizing Properties	Not an oxidizer

## SECTION 10 - STABILITY AND REACTIVITY

### 10.1 Reactivity

Not reactive under normal conditions of use.

### 10.2 Chemical Stability

Stable under recommended conditions of storage and use.

### 10.3 Possibility of Hazardous Reactions

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

### 10.4 Conditions to Avoid

No information found.

### 10.5 Incompatible Materials

No incompatibility data found.

### 10.6 Hazardous Decomposition Products

Phosphorus oxides may form when heated to decomposition.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Product LD50 Values

#### Oral Rat LD50 (mg/kg)

No Data

#### Dermal Rabbit LD50 (mg/kg)

No Data

### Component Cancer List Status

	NTP Carcinogen		IARC Category
	Known	Anticipated	
Dipotassium Phosphate	No	No	None

### Potential Health Effects

#### Inhalation

Not expected to be a health hazard by inhalation.

#### Ingestion

Phosphates are slowly and incompletely absorbed when ingested, and seldom result in systematic effects. Some adverse health effects have

occurred. The toxicity of phosphates is because of their ability to sequester calcium. Acute potassium intoxication by mouth is rare because large single doses usually induce vomiting and because in the absence of pre-existing kidney damage, potassium is rapidly excreted. Potassium poisoning can result in heart effects.

**Skin**

No adverse effects expected.

**Eyes**

No adverse effects expected but may cause mechanical irritation.

**Carcinogenicity**

Not listed as a known or anticipated carcinogen by NTP or IARC.

**Mutagenicity**

No information found.

**Reproductive Toxicity**

No information found.

**Teratogenic Effects**

No information found.

**Routes of Entry**

No information found.

**Target Organ Statement**

Persons with impaired kidney function may be more susceptible to the effects of the substance.

**SECTION 12 - ECOLOGICAL INFORMATION**

**12.1 Toxicity**

	<b>Vertebrates</b>	<b>Invertebrates</b>	<b>Algae</b>	<b>Microorganisms</b>
Aquatic Toxicity (ppm unless otherwise noted)	LC50 (96hr trout) >100mg/l	EC50 (48hr, daphnia) >100mg/l	EC50 > 100mg/l	EC50 >1000mg/l
	<b>Birds</b>	<b>Arthropods</b>	<b>Plants</b>	<b>Microorganisms</b>
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

**12.2 Persistence and Degradability**

No data

**12.3 Bioaccumulative Potential**

No data

**12.4 Mobility in Soil**

No data

**12.5 Results of PBT and vPvB Assessment**

No data

**12.6 Other Adverse Effects**

None

**SECTION 13 - DISPOSAL CONSIDERATIONS**

**13.1 Waste Treatment Methods**

Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product characteristics at time of disposal. Dispose of packaging as product.

**SECTION 14 - TRANSPORT INFORMATION**

	<b>ADR/RID</b>	<b>IATA</b>	<b>IMO</b>	<b>DOT</b>
<b>14.1 UN Number</b>	N.A.	N.A.	N.A.	N.A.
<b>14.2 Shipping Name</b>	Not Regulated	Not Regulated	Not Regulated	Not Regulated
<b>14.3 Hazard Class</b>	N.A.	N.A.	N.A.	N.A.
<b>14.4 Packing Group</b>	N.A.	N.A.	N.A.	N.A.
<b>14.5 Environmental Hazards</b>	N.A.	N.A.	N.A.	N.A.
<b>14.6 Special Precautions</b>	N.A.	N.A.	N.A.	N.A.

**SECTION 15 - REGULATORY INFORMATION**

## 15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance/Mixture

### United States

#### TSCA Regulatory Statement

All intentional ingredients are listed on the TSCA Inventory.

#### SARA 311/312 Hazard Categories

Component	Fire	Pressure	Reactivity	Acute	Chronic
Dipotassium Phosphate	No	No	No	Yes	Yes

### Europe

#### EEC Regulatory

All intentional ingredients are listed on the European EINECS Inventory.

## SECTION 16 - OTHER INFORMATION

### Revisional Updates

4/26/2019 - Updated Section 1.4

5/29/2015 - Updated Sections 2.1 and 3.2

10/22/2013 - Released Version 1.0

### NFPA Codes

Health 1 Flammability 0 Reactivity 0

### Dangers

Dipotassium Phosphate

None

**MANUFACTURER DISCLAIMER:** The information given herein is offered in good faith as accurate, but without guarantee. Conditions of the use and suitability of the product for particular uses are beyond our control. All risks of use of the product are therefore assumed by the user. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.