

SECTION I	NAME	24 HOUR EMERGENCY ASSISTANCE
Product	SIMULATED URINE SAMPLE #1	
Chemical Synonyms	N/A	
Formula	Mixture.	
Unit Size	250 mL	
C.A.S. No.	Mixture. See Section II.	

CHEMTREC
800-424-9300
Day 716-226-6177

NFPA
HAZARD RATING
LEAST SLIGHT MODERATE HIGH EXTREME
0 1 2 3 4

Health 1
Fire 0
Reactivity 0
HMIS*
HIGH 3
EXTREME 4

SECTION II INGREDIENTS OF MIXTURES		TLV Units	
Principal Component(s)	%		
Glucose: CAS No. 50-99-7	1.00%	None established.	
Benzoic acid: CAS No. 65-85-0	0.10%	None established.	
Hydrochloric acid: CAS No. 7647-01-0	<0.001%	None established.	
Food coloring: CAS No. FDC Yellow	<0.001%	None established.	
Odorant	<0.001%	None established.	
Distilled water: CAS No. 7732-18-5	98.89%	None established.	

SECTION III PHYSICAL DATA	
Melting Point (°F)	Freezes approx. 0°C (32°F)
Boiling Point (°F)	Approx. 100°C (212°F)
Vapor Pressure (mm Hg)	14 mm (water)
Vapor Density (Air=1)	0.7 (water)
Solubility in Water	Complete.
Appearance & Odor	Clear, yellow color, water like liquid; no odor.

SECTION IV FIRE AND EXPLOSION HAZARD DATA	
Flash Point (Method Used)	Non-flammable liquid.
Extinguisher Media	Use any media suitable for extinguishing supporting fire.

SPECIAL FIREFIGHTING PROCEDURES

If involved in fire situation, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS

In fire conditions resulting in the evaporation of the water of solution hazardous decomposition products may be produced as dust or fume.

SECTION V	Threshold Limited Value
Effects of Overexposure	Low toxicity, the toxicological properties of this product have not been thoroughly investigated. Exercise appropriate procedures to minimize potential hazards.
Emergency and First Aid Procedures	INGESTION: If swallowed, if conscious, give one or two glasses of water to drink, induce vomiting and call a physician. Never give anything by mouth to an unconscious person. SKIN: Flush with water, then wash with mild soap and water. EYES: Flush thoroughly with water, lifting upper and lower eyelids occasionally. If irritation develops or persists, get medical attention.

SECTION VI REACTIVITY DATA	
Stability	Unstable Stable X
Incompatibility (Materials to Avoid)	Strong oxidizers.
Hazardous Decomposition Products	When heated to decomposition may emit carbon dioxide and/or carbon monoxide. Solution (C) will yield a very small amount of oxides of phosphorous.
Hazardous Polymerization	Conditions to Avoid
May Occur	Will Not Occur X
	Not applicable.

SECTION VII SPILL OR LEAK PROCEDURES
Steps to be taken in case material is released or spilled
Flush the aqueous solution down drain with plenty of water.

Waste Disposal Method
Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.
Flush the aqueous solution down drain with plenty of water.

SECTION VIII SPECIAL PROTECTION INFORMATION	
Respiration Protection (Specify Type)	None needed in normal laboratory handling. If misty conditions prevail, work in ventilation hood or wear a NIOSH/MSHA-approved respirator.
Ventilation	Local Exhaust Mechanical (General) None needed. Special None needed.
Protective Gloves	Rubber.
Other Protective Equipment	Lab coat, apron, eye wash station, proper gloves.
Eye Protection	Chemical safety glasses.

SECTION IX SPECIAL PRECAUTIONS
Precautions to be Taken in Handling & Storing
Store in a cool place. Wash thoroughly after handling.
Keep container tightly closed when not in use.

Other Precautions
Read label on container before using. Do not wear contact lenses when working with chemicals.
Avoid contact with skin, eyes and mucous membranes.
Remove and wash contaminated clothing.

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product SIMULATED URINE SAMPLE #2

Chemical N/A

Formula Mixture.

Unit Size 250 mL

C.A.S. No. Mixture. See Section II.

SECTION II INGREDIENTS OF MIXTURES

		CHEMTREC 800-424-9300 Day 716-226-6177		Health	1
NFPA HAZARD RATING		Reactivity		Fire	0
0		1		MODERATE	3
1		2		HIGH	4
2		3		EXTREME	

Principal Component(s)

Glucose. CAS No. 50-99-7	1.00%	TLV Units
Benzonic acid. CAS No. 65-85-0	0.10%	None established.
Hydrochloric acid. CAS No. 7647-01-0	<0.001%	None established.
Food coloring. CAS No. FDC Yellow	<0.001%	None established.
Odorant	<0.001%	None established.
Distilled water. CAS No. 7732-18-5	98.89%	None established.

LOW HAZARD.

SECTION III PHYSICAL DATA

Melting Point (°F)	Freezes approx. 0°C (32°F)	Specific Gravity (H ₂ O = 1)	Approx. 1.0
Boiling Point (°F)	Approx. 100°C (212°F)	Percent Volatile by Volume (%)	Approx. 99%
Vapor Pressure (mm Hg)	14 mm (water)	Evaporation Rate (Ether = 1)	Greater than 1.
Vapor Density (Air=1)	0.7 (water)		

Solubility in Water Complete.

Appearance & Odor Clear, yellow color, water like liquid, no odor.

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable liquid.	Flammable Limits in Air % by Volume	N/A	Lower	Upper
---------------------------	-----------------------	-------------------------------------	-----	-------	-------

Extinguisher Media Use any media suitable for extinguishing supporting fire.

SPECIAL FIREFIGHTING PROCEDURES

If involved in fire situation, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS

In fire conditions resulting in the evaporation of the water of solution hazardous decomposition products may be produced as dust or fume.

D.O.T. NON-REGULATED.

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V

HEALTH HAZARD DATA

Threshold Limited Value

None assigned to any component in this series of Urine solutions. (ACGIH 1992-93).

Effects of Overexposure

Low toxicity, the toxicological properties of this product have not been thoroughly investigated. Exercise appropriate procedures to minimize potential hazards.

Emergency and First Aid Procedures

INGESTION: If swallowed, if conscious, give one or two glasses of water to drink, induce vomiting and call a physician. Never give anything by mouth to an unconscious person. **SKIN:** Flush with water, then wash with mild soap and water. **EYES:** Flush thoroughly with water, lifting upper and lower eyelids occasionally. If irritation develops or persists, get medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	High temperature and heat.
	Stable	X	
Incompatibility (Materials to Avoid)	Strong oxidizers.		

Hazardous Decomposition Products When heated to decomposition may emit carbon dioxide and/or carbon monoxide. Solution (C) will yield a very small amount of oxides of phosphorus.

Hazardous Polymerization

May Occur Will Not Occur

Not applicable.

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled

Flush the aqueous solution down drain with plenty of water.

Waste Disposal Method

Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.

Flush the aqueous solution down drain with plenty of water.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection None needed in normal laboratory handling. If misty conditions prevail, work in (Specify Type) ventilation hood or wear a NIOSH/MSHA-approved respirator.

Ventilation	Local Exhaust	None needed.	Special	No.
	Mechanical (General)	None needed.	Other	No.

Protective Gloves

Rubber.

Chemical safety glasses.

Other Protective Equipment Lab coat, apron, eye wash station, proper gloves.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing

Store in a cool place. Wash thoroughly after handling.

Keep container tightly closed when not in use.

Other Precautions

Read label on container before using. Do not wear contact lenses when working with chemicals.

Avoid contact with skin, eyes and mucous membranes. Remove and wash contaminated clothing.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision No. 1	Date 6/14/00	Approved Michael Raszeja	Chemical Safety Coordinator	MR
----------------	--------------	--------------------------	-----------------------------	----

The information contained herein is furnished without warranty of any kind. Employees should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards. Printed on recycled paper.

MATERIAL SAFETY DATA SHEET

SECTION V HEALTH HAZARD DATA

None assigned to any component in this series of solutions. (ACGIH 1992-93).

Effects of Overexposure

Low toxicity, the toxicological properties of this product have not been thoroughly investigated. Exercise appropriate procedures to minimize potential hazards.

Emergency and First Aid Procedures

INGESTION: If swallowed, if conscious, give one or two glasses of water to drink, induce vomiting and call a physician. Never give anything by mouth to an unconscious person. **SKIN:** Flush with water, then wash with mild soap and water. **EYES:** Flush thoroughly with water, lifting upper and lower eyelids occasionally. If irritation develops or persists, get medical attention.

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	SIMULATED URINE SAMPLE #3
Chemical Synonyms	N/A
Formula	Mixture.
Unit Size	250 mL
C.A.S. No.	Mixture. See Section II.



CHEMTREC
800-424-9300
Day 716-226-6177

NFPA
HAZARD RATING
LEAST SLIGHT MODERATE HIGH EXTREME
0 1 2 3 4

Health	1
Fire	0
Reactivity	0

HMIS*

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Inert Microcomponents (Proprietary)	<0.01%	None established.
Sodium hydroxide: CAS No. 1310-73-2	<0.1%	C 2 mg/m ³
Food coloring: CAS No. FDC Yellow	<0.1%	None established.
Odorant	<0.1%	None established.
Distilled water: CAS No. 7732-18-5	98.9%	None established.

LOW HAZARD.

SECTION III PHYSICAL DATA

Melting Point (°F)	Freezes approx. 0°C (32°F)	Specific Gravity (H ₂ O = 1)	Approx. 1.0
Boiling Point (°F)	Approx. 100°C (212°F)	Percent Volatile by Volume (%)	Approx. 99%
Vapor Pressure (mm Hg)	14 mm (water)	Evaporation Rate (Ether = 1)	Greater than 1.
Vapor Density (Air=1)	0.7 (water)		
Solubility in Water	Complete.		
Appearance & Odor	Clear, yellow color, water like liquid; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable liquid.	Flammable Limits in Air % by Volume	Lower N/A Upper
---------------------------	-----------------------	-------------------------------------	-----------------

Use any media suitable for extinguishing supporting fire.

SPECIAL FIREFIGHTING PROCEDURES

If involved in fire situation, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS

In fire conditions resulting in the evaporation of the water of solution hazardous decomposition products may be produced as dust or fume.

D.O.T. NON-REGULATED.

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V

Threshold Limited Value

None assigned to any component in this series of solutions. (ACGIH 1992-93).

Effects of Overexposure

Low toxicity, the toxicological properties of this product have not been thoroughly investigated. Exercise appropriate procedures to minimize potential hazards.

Emergency and First Aid Procedures

INGESTION: If swallowed, if conscious, give one or two glasses of water to drink, induce vomiting and call a physician. Never give anything by mouth to an unconscious person. **SKIN:** Flush with water, then wash with mild soap and water. **EYES:** Flush thoroughly with water, lifting upper and lower eyelids occasionally. If irritation develops or persists, get medical attention.

SECTION VI REACTIVITY DATA

Stability

High temperature and heat.

Incompatibility (Materials to Avoid)

Strong oxidizers.

Hazardous Decomposition Products

When heated to decomposition may emit carbon dioxide and/or carbon monoxide. Solution (C) will yield a very small amount of oxides of phosphorous.

Hazardous Polymerization

Not applicable.

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled

Flush the aqueous solution down drain with plenty of water.

Waste Disposal Method

Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.

Flush the aqueous solution down drain with plenty of water.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection None needed in normal laboratory handling. If misty conditions prevail, work in ventilation hood or wear a NIOSH/MSHA-approved respirator.

Ventilation	Local Exhaust	Special	No.
Mechanical (General)	None needed.	Other	No.

Protective Gloves

Rubber.

Eye Protection

Chemical safety glasses.

Other Protective Equipment Lab coat, apron, eye wash station, proper gloves.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing

Keep container tightly closed when not in use.

Store in a cool place. Wash thoroughly after handling.

Other Precautions

Read label on container before using. Do not wear contact lenses when working with chemicals.

Avoid contact with skin, eyes and mucous membranes. Remove and wash contaminated clothing.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision No. 1 Date 6/14/00 Approved Michael Raszeja Chemical Safety Coordinator MR

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards. Printed on recycled paper.


Natural Science Equipment
P O Box 92912
Rochester, NY 14692-9012
716-356-2502

397 Vansickle Road
St. Catharines, Ontario L2S 3T5
815 Fiero Lane
San Luis Obispo, CA 93403-5010

MSDS No.
Effective Date June 14, 2000

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	SIMULATED URINE SAMPLE #4
Chemical Synonyms	N/A
Formula	Mixture.
Unit Size	250 mL
C.A.S. No.	Mixture. See Section II.



CHEMTREC
800-424-9300
Day 716-226-6177

NEPA
HAZARD RATING
LEAST SLIGHT MODERATE HIGH EXTREME

0	1	2	3	4
---	---	---	---	---

Health	1
Fire	0
Reactivity	0

HMS*

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Food coloring: CAS No. FDC Yellow	<0.1%	None established.
Odorant	<0.1%	None established.
Distilled water: CAS No. 7732-18-5	98.9%	None established.

SECTION III PHYSICAL DATA

Melting Point (°F)	Freezes approx. 0°C (32°F)	Specific Gravity (H ₂ O = 1)	Approx. 1.0
Boiling Point (°F)	Approx. 100°C (212°F)	Percent Volatile by Volume (%)	Approx. 99%
Vapor Pressure (mm Hg)	14 mm (water)	Evaporation Rate (Ether = 1)	Greater than 1.
Vapor Density (Air=1)	0.7 (water)		
Solubility in Water	Complete.		
Appearance & Odor	Clear, yellow color, water like liquid; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable liquid.	Flammable Limits in Air % by Volume	N/A	Lower	Upper
---------------------------	-----------------------	-------------------------------------	-----	-------	-------

Extinguisher Media Use any media suitable for extinguishing supporting fire.

SPECIAL FIREFIGHTING PROCEDURES

If involved in fire situation, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS

In fire conditions resulting in the evaporation of the water of solution hazardous decomposition products may be produced as dust or fume.

D.O.T. NON-REGULATED.

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V HEALTH HAZARD DATA

Threshold Limited Value None assigned to any component in this series of A Urine solutions. (ACGIH 1992-93).

Effects of Overexposure

Low toxicity, the toxicological properties of this product have not been thoroughly investigated. Exercise appropriate procedures to minimize potential hazards.

Emergency and First Aid Procedures

INGESTION: If swallowed, if conscious, give one or two glasses of water to drink, induce vomiting and call a physician. Never give anything by mouth to an unconscious person. SKIN: Flush with water, then wash with mild soap and water. EYES: Flush thoroughly with water, lifting upper and lower eyelids occasionally. If irritation develops or persists, get medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable	Stable	Conditions to Avoid
		X	High temperature and heat.

Incompatibility (Materials to Avoid) Strong oxidizers.

Hazardous Decomposition Products

When heated to decomposition may emit carbon dioxide and/or carbon monoxide. Solution (C) will yield a very small amount of oxides of phosphorous.

Hazardous Polymerization	Will Not Occur
May Occur	X

Not applicable.

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled

Flush the aqueous solution down drain with plenty of water.

Waste Disposal Method

Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.

Flush the aqueous solution down drain with plenty of water.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection None needed in normal laboratory handling. If misty conditions prevail, work in ventilation hood or wear a NIOSH/MSHA-approved respirator.

Ventilation	Local Exhaust	Mechanical (General)	None needed.	Special	No.
-------------	---------------	----------------------	--------------	---------	-----

Protective Gloves	Rubber.	Eye Protection	Chemical safety glasses.
-------------------	---------	----------------	--------------------------

Other Protective Equipment Lab coat, apron, eye wash station, proper gloves.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing

Store in a cool place. Wash thoroughly after handling.

Keep container tightly closed when not in use.

Other Precautions Read label on container before using. Do not wear contact lenses when working with chemicals.

Avoid contact with skin, eyes and mucous membranes. Remove and wash contaminated clothing.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision	No. 1	Date 6/14/00	Approved Michael Raszeja	Chemical Safety Coordinator	MR
----------	-------	--------------	--------------------------	-----------------------------	----

The information contained herein is furnished without warranty of any kind. Employees should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards. Printed on recycled paper.