

MATERIAL SAFETY DATA SHEFT

397 Vansickle Road St. Catharines, Ontario L2S 3T5

815 Fiero Lane

Rochester, NY 14692-9012 716-359-2502

SECTION

Product ynonyms Chemical

MSDS No. Effective Date San Luis Obispo, CA 93403-5010

June 14, 2000

24 HOUR EMERGENCY ASSISTANCE

Product	SIMULATED URINE SAMPLE #1	CHENTEEC		
Chemical	N/A	800-424-9300	Ť	-
		X Day 716-226-6177	Fire	0
-ormula	Mixture.	NEBA	Reactivity	0
Unit Size	250 mL	HAZARD RATING	HMIS].
		LEAST SLIGHT MODERATE	HIGH E	EXTREME
.A.S. No.	C.A.S. No. Mixture. See Section II.	0 1 2	3	4

None established. None established. None established. None established. None established. None established. TLV Units Greater than 1. Approx. 99% Approx. 1.0 1.00% <0.001% <0.001% =1 Specific Gravity (H2O = 1) % **INGREDIENTS OF MIXTURES** Evaporation Rate Percent Volatile by Volume (%) Clear, yellow color, water like liquid; no odor, PHYSICAL DATA Freezes approx. 0°C (32°F) Approx. 100°C (212°F) 14 mm (water) Hydrochloric acid: CAS No. 7647-01-0 Food coloring: CAS No. FDC Yellow 0.7 (water) Complete. Distilled water: CAS No. 7732-18-5 Glucose: CAS No. 50-99-7 Benzolc acid: CAS No. 65-85-0 Principal Component(s) Vapor Pressure (mm Hg) Vapor Density (Air=1) Appearance & Odor LOW HAZARD. Melting Point (°F) Solubility in Water SECTION III Boiling Point (°F) SECTION II

SECTION IV		FIRE AND EXPLOSION HAZARD DATA	DATA	
Flash Point (Method Used)	Non-flammable liquid.	Flammable Limits in Air % by Volume N/A	Lower	addn
Extinguisher Media	Use any media suitable for extinguishing supporting fire.	uishing supporting fire.		

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

> **EXPLOSION HAZARDS** UNUSUAL FIRE AND

solution hazardous decomposition products may be produced as in fire conditions resulting in the evaporation of the water of

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NON-DECLIE ATEN	CIOCULATION	The state of the s	
1			

D.O.T. NON-REGULATED.
Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

HEALTH HAZARD DATA Threshold Limited Value SECTION V

None assigned to any component in this series on 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 eyelids occasionally. If irritation develops or persists, get medical attention. and water. EYES: Flush thoroughly with water, lifting upper and lower

SECTION VI	IN NI	REACTIVITY DATA	
Ctability	Unstable	Conditions to Avoid	
Stability	Stable	×	High temperature and heat.
Incompatibility (Materials to Av	Incompatibility (Materials to Avoid)	Strong oxidizers.	
Hazardous	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.		Not applicable.		DURES	
phosphorous.	Conditions to Avoid			SPILL OR LEAK PROCEDURES	
on Products	ymerization	Will Not Occur	×		
Decomposition Products	Hazardous Polymerization	May Occur		SECTION VII	

material is released or spilled Steps to be taken in case

Flush the aqueous solution down drain with plenty of water.

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. Waste Disposal Method

Flush the aqueous solution down drain with plenty of water.

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

Vontilation	Local Exhaust	None needed.	Special	No.
Verillation	Mechanical (General)	None needed.	Other	No.
Protective Gloves	loves	Rubber.	Eye Protection	tion Chemical safety glasses.

SPECIAL PRECAUTIONS Lab coat, apron, eye wash station, proper gloves. SECTION IX Other Protective

Precautions to be Taken in Handling & Storing Other Precautions

Avoid contact with skin, eyes and mucous membranes. liner before using. Do not wear contact lenses when working with chemicals

Store in a cool place. Wash thoroughly after handling.

Remove and wash contaminated clothing.

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

Michael Raszeja Approved Revision No. 1 Date 6/14/00

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

P O Box 92912 Rochester, NY 14692-9012 716-359-2502

MATERIAL SAFETY DATA SHEET

397 Vansickle Road St. Catharines, Ontario L2S 3T5 815 Fiero Lane

San Luis Obispo, CA 93403-5010

MSDS No. Effective Date

June 14, 2000

Threshold Limited Value **SECTION V** HEALTH HAZARD DATA

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

thoroughly investigated.

potential hazards.

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

24 HOUR EMERGENCY ASSISTANCE Health Effects of Overexposure

CHEMTREC 800-424-9300 Day 716-226-6177 Fire 0 Emergency and

NFPA HAZARD R. LEAST SLIGHT

LEAST

C.A.S. No.

Mixture. See Section II.

SECTION II

INGREDIENTS OF MIXTURES

%

Unit Size Formula

250 mL Mixture X

Chemical Product

SECTION

SIMULATED URINE SAMPLE #2

NAME

Principal Component(s)

Glucose: CAS No. 50-99-7 Benzoic acid: CAS No. 65-85-0

Hydrochloric acid: CAS No. 7647-01-0 Food coloring: CAS No. FDC Yellow Distilled water: CAS No. 7732-18-5

1.00% 0.10% 0.001% <0.001% <0.001% 98.89%

None established. None established. None established.

Vone established. TLV Units

None established.

AATING T MODERATE HIGH 2 3	Rea
HMIS * EXTREME 4	ctivity 0
	FIRST AID Procedures
an unconscious person. Skill, Flush and water. EYES: Flush thoroughly we eyelids occasionally. If irritation develo	INGESTION: If swallowed, if conscious

ops or persists, get medical attention vith water, lifting upper and lower cian. Never give anything by mouth to us, give one or two glasses of water to with water, then wash with mild soap

Stability Unst	table	Conditions to Avoid
۲	Stable ×	
Incompatibility (Materials to Avoid)	void)	Strong oxidizers.
Hazardous Decomposition Products	n 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	merization	Conditions to Avoid
May Occur	Will Not Occur	
	×	
SECTION VII		SPILL OR LEAK PROCEDURES

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

None needed in normal laboratory handling. It misty conditions prevail, work in specify type) Ventilation None needed in normal laboratory handling. It misty conditions prevail, work in ventilation Ventilation None needed. Special No. N	Chemical safety glasses.	ction	Eye Protection	Rubber.		Protective Gloves
Local Ex	No.		Other	None needed.	nanical (General)	Ľ
rotection	No.		Special	None needed.	Exhaust	
	tions prevall, work in tor.	misty conditi wed respirat	MSHA-appro	od or wear a NIOSH	None needed ventilation ho	(Specify Type)

SECTION IX Lab coat, apron, eye wash station, proper gloves.

SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing eep container tightly closed when not in use

Store in a cool place. Wash thoroughly after handling

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

MR	Chemical Safety Coordinator	No. 1 Date 6/14/00 Approved Michael Raszeja	oroved .	App	6/14/00	Date	No. 1
		use only. Not for drug, food or household use. Keep out of reach of children.	e. Keep out of	hold us	food or house	Not for drug,	use only.
		Remove and wash contaminated clothing.	and wash co	emove	מת		

For laboratory

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

D.O.T. NON-REGULATED. **EXPLOSION HAZARDS**

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

dust or fume.

UNUSUAL FIRE AND

PROCEDURES

breathing apparatus and full protective clothing.

If involved in fire situation, wear a NIOSH/MSHA-approved self-contained

SPECIAL FIREFIGHTING

Extinguisher

Use any media suitable for extinguishing supporting fire

Method Used) Flash Point

Non-flammable liquid.

Boiling Point (°F)

Melting Point (°F)

Freezes approx. 0°C (32°F)

Specific Gravity (H2O = 1)

Ether

1

Greater than 1 Approx. 99% Approx. 1.0

Steps to be taken in case

PHYSICAL DATA

Approx. 100°C (212°F)

SECTION III

LOW HAZARD

Vapor Pressure (mm Hg)

Solubility in Water

Vapor Density (Air=1)

0.7 (water) 14 mm (water)

Complete.

Appearance & Odor

Clear, yellow color, water like liquid; no odor.

SECTION

31313

AND EXPLOSION HAZARD

DATA

uppe

Flammable Limits in Air % by Volume

ZA

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

Rochester, NY 14692-9012 716-359-2502 WARD Natural Science I P O Box 92912

SECTION

Product Synonyms Chemical

MATERIAL SAFETY DATA SHEET

397 Vansickle Road St. Catharines, Ontario L2S 3T5

815 Fiero Lane San Luis Obispo, CA 93403-5010

MSDS No. Effective Date June 14, 2000

24 HOUR EMERGENCY ASSISTANCE EXTREME + SIMH Reactivity Health Fire HOH CHEMTREC 800-424-9300 Day 716-226-6177 NFPA HAZARD RATING LEAST SLIGHT MODERATE SIMULATED URINE SAMPLE #3 NAME C.A.S. No. | Mixture. See Section II. Mixture. 250 mL N/A

6 INGREDIENTS OF MIXTURES SECTION II

Jnit Size

Formula

4

Principal Component(s)	%	TLV Units
Inert Microcomponents (Proprietary) Sodium hydroxide: CAS No. 1310-73-2	<0.01% <0.1%	None established. C 2 mg/m³
Food coloring: CAS No. FDC Yellow Odorant	<0.1%	None established. None established.
Distilled water: CAS No. 7732-18-5	%6'86	None established.
LOW HAZARD.		
SECTION III BUYSICAL DATA		

Greater than 1. Approx. 99% Approx. 1.0 F Specific Gravity (H2O = 1) Evaporation Rate Ether Percent Volatile by Volume (%) Clear, yellow color, water like liquid; no odor. PHYSICAL DAIL Freezes approx. 0°C (32°F) Approx. 100°C (212°F) 14 mm (water) 0.7 (water) Complete, Vapor Pressure (mm Hg) Vapor Density (Air=1) Appearance & Odor Solubility in Water Melting Point (°F) Boiling Point (°F) SECTION

FIRE AND EXPLOSION HAZARD DATA A/N Use any media suitable for extinguishing supporting fire. Flammable Limits in Air % by Volume Non-flammable liquid, SECTION IV Method Used) Extinguisher

Opper

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

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

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	NON DECLINATED	ALCO LA
	-	

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HEALTH HAZARD DATA Threshold Limited Value SECTION V

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

al Urine

Effects of Overexposure

thoroughly investigated. Exercise appropriate procedures to minimize Low toxicity, the toxicological properties of this product have not been 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 eyelids occasionally. If irritation develops or persists, get medical attention. and water. EYES: Flush thoroughly with water, lifting upper and lower

SECTION VI		7	REACTIVITY DATA	
Ctobility	Unstable)	Conditions to Avoid	food bare existence and della
Stability	Stable	×		nigii temperature and near.
Incompatibility (Materials to Avoid)	bility to Avoid)	Strong	Strong oxidizers.	
Hazardous Decompos	Hazardous Decomposition Products	lucts	When heated to decomposition monoxide. Solution (C) will yie phosphorous.	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	Hazardous Polymerization		Conditions to Avoid	
May Occur	1	Will Not Occur		Not applicable.
		×		
SECTION VII	II/ N	SP	SPILL OR LEAK PROCEDURES	URES
Steps to b	Steps to be taken in case material is released or spilled	case or spilled		
				Elicabeth agreement of the control of water

Flush the aqueous solution down drain with plenty of water.

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. Waste Disposal Method

Flush the aqueous solution down drain with plenty of water.

SECTION VIII		SPECIAL PROTECTION INFORMATION	I ON IN	FORMATION	12
Respiration Protection		ed in normal laboratory ha	andling. If n	None needed in normal laboratory handling. If misty conditions prevail, work in	
(Specify Type)	ventilation	ventilation hood or wear a NIOSH/MSHA-approved respirator.	SHA-approv	ed respirator.	1
	Local Exhaust	None needed.	Special	No.	

Chemical safety glasses. Š Eye Protection Lab coat, apron, eye wash station, proper gloves. Other None needed. Rubber. Ventilation Mechanical (General) Protective Gloves Other Protective

SECTION IX

SPECIAL PRECAUTIONS

Store in a cool place. Wash thoroughly after handling. Precautions to be Taken in Handling & Storing

seep container tightly closed when not in use

Other Precautions

container before using. Do not wear contact lenses when working

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.

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I CAISION NO.	The information contained herein is gathered by them and must make it	the and the safety and beautiful

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Chemical Salety

716-359-2502

SECTION

SIMULATED URINE SAMPLE #4

NAME

MATERIAL SAFETY DATA SHEET

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

> MSDS No. Effective Date June 14, 2000

24 HOUR EMERGENCY ASSISTANCE

Threshold Limited Value

SECTION V

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

Health Fire 0 Emergency and First Aid Procedures

Reactivity 0 + SIMH

CHEMTREC 800-424-9300

NGREDIENTS OF MIXTURES LEAST NFPA HAZARD RATING SLIGHT Day 716-226-6177 MODERATE HIGH

Unit Size Formula synonyms Chemical Product

> Mixture. NA

SECTION

C.A.S. No. | Mixture. See Section II. 250 mL

EXTREME

Principal Component(s) %

LOW HAZARD Distilled water: CAS No. 7732-18-5 Odorant Food coloring: CAS No. FDC Yellow 98.9% <0.1% <0.1% None established. None established None established. TLV Units

Stability Unstable Stable

SECTION VI

REACTIVITY DATA

and water. EYES: Flush thoroughly with water, lifting upper and lower

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

Conditions to Avoid

High temperature and heat

Decomposition Products

Hazardous

(Materials to Avoid)

Strong oxidizers

ncompatibility

Hazardous Polymerization

Conditions to Avoid

Not applicable

phosphorous.

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

May Occur

Will Not Occur

Vapor Density (Air=1) Vapor Pressure (mm Hg) Boiling Point (°F) Melting Point (°F) SECTION III 14 mm (water) 0.7 (water) Approx. 100°C (212°F) Freezes approx. 0°C (32°F) PHYSICAL DATA evaporation Hale Ether Specific Gravity (H2O = 1) Volume (%) Greater than Approx. 99% Approx. 1.0

Solubility in Water Complete.

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

Extinguisher Method Used) SECTION IV ash Point Non-flammable liquid. FIRE AND EXPLOSION HAZARD DATA % by Volume Flammable Limits in Air

SPECIAL FIREFIGHTING

Use any media suitable for extinguishing supporting fire

PROCEDURES

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

EXPLOSION HAZARDS UNUSUAL FIRE AND

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

NON-REGULATED.

D.O.T.

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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.

material is released or spilled Steps to be taken in case

SECTION VII

SPILL OR LEAK PROCEDURES

(Specify Type) SECTION VIII Protection None needed SPECIAL PROTECTION INFORMATION MSHA-approved conditions prevail, work in

Ventilation Mechanical (General) Local Exhaust ventilation hood or wear a NIOSH None needed. None needed. Other 8

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

Rubber.

Eye Protection

Chemical safety glasses.

SPECIAL PRECAUTIONS

Protective Gloves

Precautions to be Taken in Handling & Storing SECTION IX

(eep 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

For laboratory

Remove and wash contaminated clothing

Avoid contact with skin, eyes and mucous membranes

Chemical Sa Coordinator	Michael Raszeja	Approved	Date 6/14/00	Date	No. 1	٦
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Revision

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