



MATERIAL SAFETY DATA SHEET

Revision Number A95009F
3/30/09

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY / UNDERTAKING

Product name YSI 2357 Buffer Concentrate Kit
Synonyms None
Chemical characterization Mixture of inorganic phosphates and other salts
Manufacturer, importer, supplier YSI, Inc
1700/1725 Brannum Lane
Yellow Springs, OH 45387
EMERGENCY TELEPHONE NUMBER 1- 937- 767- 7241

2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Chemical Name	% Weight	IARC*	NTP*	OSHA*
7558-79-4	Sodium phosphate dibasic	50-55	N/A	N/A	N/A
7558-80-7	Sodium acid phosphate	10-15	N/A	N/A	N/A
7647-14-5	Sodium Chloride	16-22	N/A	N/A	N/A
25102-12-9	Glycine, N,N'-1,2-ethanediybis(N-carboxymethyl) dipotassium salt, dihydrate	<10	N/A	N/A	N/A
532-32-1	Sodium benzoate	<10	N/A	N/A	N/A
1405-41-0	Gentamicin, sulfate (salt)	<1	N/A	N/A	N/A

* IARC - Group 1 (Carcinogenic to humans)

* NTP - Report on Carcinogens - Known Carcinogens

* OSHA - Regulated Carcinogens

3. HAZARDS IDENTIFICATION

Emergency Overview

Dust from this product may be irritating to eyes, skin, and respiratory tissue

Eye Contact	<ul style="list-style-type: none">Can cause severe irritation
Skin Contact	<ul style="list-style-type: none">Exposure can cause skin irritation
Inhalation	<ul style="list-style-type: none">Possible irritation of nasal passages from breathing dust from this product
Ingestion	<ul style="list-style-type: none">No effects expected from normal use and minor amounts ingested. Ingestion of large amounts, a cup full or more, can cause digestive system upset.
General Advice	<ul style="list-style-type: none">As with any chemical, use caution when handlingIf exposure effects persist seek medical attention
Principle Routes of Exposure	<ul style="list-style-type: none">Eyes, absorption, ingestion

4. FIRST AID MEASURES

General Advice	<ul style="list-style-type: none">If exposure symptoms persist, seek medical attention.
Skin Contact	<ul style="list-style-type: none">Wash exposed areas with soap and water for 15 minutes
Eye Contact	<ul style="list-style-type: none">Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes
Inhalation	<ul style="list-style-type: none">Move to fresh air in case of accidental inhalation
Ingestion	<ul style="list-style-type: none">Do not swallow; rinse mouth with water and afterwards drink plenty of water.
Notes to Physician	<ul style="list-style-type: none">Treat symptomatically
Protection of First-Aiders	<ul style="list-style-type: none">Use necessary personal protective equipment
Aggravated Medical Conditions	<ul style="list-style-type: none">Users with skin conditions (eczema, psoriasis, etc), respiratory conditions

	(asthma, bronchitis, emphysema, etc), or with chemical sensitivities should take protective precautions
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5. FIRE-FIGHTING MEASURES

Flash Point	<ul style="list-style-type: none"> None
Suitable Extinguishing Media	<ul style="list-style-type: none"> Not applicable to this product
Extinguishing media which must not be used for safety reasons	<ul style="list-style-type: none"> None

Specific Hazards

Special exposure hazards rising from the substance or preparation itself, its combustion products, or released gases	<ul style="list-style-type: none"> Material can emit phosphorous oxides when heated
Special protective equipment for firefighters	<ul style="list-style-type: none"> As in any fire, wear self-contained breathing apparatus, and full protective gear

Specific Methods

NFPA (National Fire Protection Association)	Health=1 (slight)	Reactivity=0	Fire=0	Special=0 (none)
HMIS (Hazardous Material Information System)	Health=1 (slight)	Reactivity=0	Fire=0	Special=0 (none)

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	<ul style="list-style-type: none"> Ensure adequate ventilation Use necessary personal protective equipment
Environmental precautions	<ul style="list-style-type: none"> No information available
Methods for cleaning up	<ul style="list-style-type: none"> Large amounts of material should be collected and held for proper disposal. Flush small amounts to ground or sewer

7. HANDLING AND STORAGE

Handling

Technical Measures / Precautions	<ul style="list-style-type: none"> Avoid contact with skin, eyes, and clothing
Safe Handling Advice	<ul style="list-style-type: none"> Wash hands immediately after contact to avoid hand-eye transfer Wear personal protective equipment

Storage

Technical Measures / Precautions	<ul style="list-style-type: none"> Store in properly labeled containers Keep containers tightly closed. Discard any material that may be contaminated or, which may have changed composition.
Incompatible Products	<ul style="list-style-type: none"> Avoid strong acids, oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures	<ul style="list-style-type: none"> Ensure adequate ventilation, especially in confined areas Ensure eyewash station is readily available
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Personal protective equipment

Hand Protection	<ul style="list-style-type: none"> Wear the appropriate protective gloves
Eye protection	<ul style="list-style-type: none"> Wear tightly fitting safety goggles or safety glasses with side-shields Face-shield
Respiratory Protection	<ul style="list-style-type: none"> Ensure adequate ventilation is available before handling any chemical In case of insufficient ventilation, wear suitable respiratory equipment
Skin and Body Protection	<ul style="list-style-type: none"> Long sleeved clothing Boots

	<ul style="list-style-type: none"> • apron 	
Hygiene measures	<ul style="list-style-type: none"> • Handle in accordance with good industrial hygiene and safety practice • Keep away from food, drink, and animal feeding stuffs 	
Environmental exposure controls	<ul style="list-style-type: none"> • No information available 	

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form	Solid
Appearance	White powder
Odor	mild

Important Health Safety and Environmental Information

pH	6.5 to 7.5
Boiling Point / Range	No information available
Flash Point	No information available
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Water Solubility	Soluble
Specific Gravity	>1.00
Melting Point / Range	>500°F (260°C)

10. STABILITY AND REACTIVITY

Stability	<ul style="list-style-type: none"> • Stable under normal conditions
Materials to Avoid	<ul style="list-style-type: none"> • Strong acids and oxidizing agents
Hazardous Decomposition Products	<ul style="list-style-type: none"> • When heated, phosphorous oxides emitted
Polymerization	<ul style="list-style-type: none"> • Polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Local Effects

Skin Irritation	<ul style="list-style-type: none"> • May cause skin irritation
Eye Irritation	<ul style="list-style-type: none"> • Can cause severe irritation
Inhalation	<ul style="list-style-type: none"> • May cause irritation in nasal passages
Ingestion	<ul style="list-style-type: none"> • No effects expected from normal use. Ingestion of this product may cause digestive system upset
Sensitization	<ul style="list-style-type: none"> • No information available
Chronic Toxicity	<ul style="list-style-type: none"> • No information available

Specific Effects

Carcinogenic Effects	<ul style="list-style-type: none"> • No information available
Mutagenic Effects	<ul style="list-style-type: none"> • No information available
Reproductive Toxicity	<ul style="list-style-type: none"> • No information available
Target Organ Effects	<ul style="list-style-type: none"> • No information available

12. ECOLOGICAL INFORMATION

Product Information

Aquatic Toxicity	No information available.
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Other Information

Ozone Depletion Potential; ODP; (R-11=1)	No information available.
Global Warming Potential (GWP)	No information available.
Additional Ecological Information	No information available

Mobility	No information available.
Bioaccumulative Potential	No information available.
Ecotoxicity Effects	No information available
Aquatic Toxicity	No information available.

13. DISPOSAL CONSIDERATIONS

Waste From Residues / Unused Products	<ul style="list-style-type: none"> Dispose of in accordance with local regulations
Contaminated Packaging	<ul style="list-style-type: none"> Empty containers should be rinsed and disposed of as appropriate for glass and plastic containers

14. TRANSPORT INFORMATION

DOT Not regulated

UN-No

Proper shipping name

Packing group

Subsidiary Risk

Description

15. REGULATORY INFORMATION

U.S. Inventories

CAS	Chemical Name	% Weight	ACGIH*
7558-79-4	Sodium phosphate dibasic	50-55	N/A
7558-80-7	Sodium acid phosphate	10-15	N/A
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532-32-1	Sodium benzoate	<10	N/A
1405-41-0	Gentamicin, sulfate (salt)	<1	N/A

* ACGIH - Occupational Exposure Limits - TWA's

International Inventories

CAS	Chemical Name	% Weight	EUOED*
7558-79-4	Sodium phosphate dibasic	50-55	N/A
7558-80-7	Sodium acid phosphate	10-15	N/A
7647-14-5	Sodium Chloride	16-22	N/A
25102-12-9	Glycine, N,N'-1,2-ethanediybis(N-carboxymethyl) dipotassium salt, dihydrate	<10	N/A
532-32-1	Sodium benzoate	<10	N/A
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* EUOED - EU Occupational Exposure Directive (98/24/EC) Indicative Occupational Exposure Limit Values (IOELV)

16. OTHER INFORMATION

Literary Reference None.
 Prepared By YSI, Inc.
 End of Safety Data Sheet.