



MATERIAL SAFETY DATA SHEET

MASTER IRRITANT LIQUIDS

Revision Number A96012C,
3/30/06

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

Product name YSI 3852 Ammonium Probe Fill Solution, 60 mL
Synonyms None
Chemical characterization Liquid.
Manufacturer, importer, supplier YSI, Inc.
 1700/1725 Brannum Lane
 Yellow Springs, OH 45387
 USA
EMERGENCY TELEPHONE NUMBER CHEMTREC: 1-800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% Weight	ACGIH TWA	Acute toxicity	IARC*	NTP*	OSHA*
6108-17-4	Acetate, lithium, dihydrate	12-16			N/A	N/A	N/A
7447-41-8	Lithium chloride	<0.5			N/A	N/A	N/A
7783-90-6	Silver chloride	<0.2			N/A	N/A	N/A
12125-02-9	Ammonium chloride	<0.03			N/A	N/A	N/A
7732-18-5	Water	83-87	None	NA	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:

- Use all necessary personal protection when handling this material.

Eye contact

Skin contact

Inhalation:

Ingestion:

General advice

- May cause irritation with repeated exposure.
- May cause irritation with repeated exposure
- Inhalation of dust may cause irritation of respiratory tissue.
- Ingestion may cause irritation of mouth, throat, and upset stomach.
- Users with skin conditions (eczema, psoriasis, etc.) respiratory conditions (asthma, bronchitis, emphysema, etc.) or with chemical sensitivities should take protective precautions.

Principle Routes of Exposure absorption, inhalation, and ingestion

4. FIRST AID MEASURES

General advice	Show this safety data sheet to the doctor in attendance.
Skin contact	Wash off immediately with soap and plenty of water., Seek medical attention if effects persists.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes, Keep eye wide open while rinsing, If eye irritation persists, seek medical attention
Inhalation:	Move to fresh air in case of accidental inhalation , If a person feels unwell or symptoms of respiratory irritation persist, consult a physician
Ingestion:	Do not swallow. Rinse mouth with water and afterwards drink plenty of water., Do not induce vomiting without medical advice
Notes to physician	Treat symptomatically
Protection of first-aiders	Use necessary personal protective equipment

MATERIAL SAFETY DATA SHEET MASTER IRRITANT LIQUIDS

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	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"> Not applicable
Specific hazards	
Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases	<ul style="list-style-type: none"> Material is basically water and is not combustible. May emit HCL when heated.
NFPA (National Fire Protection Association)	
HMIS (Hazardous Material Information System)	

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	<ul style="list-style-type: none"> Use necessary personal protective equipment Ensure adequate ventilation
Environmental precautions	<ul style="list-style-type: none"> No information available
Methods for cleaning up	<ul style="list-style-type: none"> Soak up with inert absorbent material After cleaning, flush away traces with water

7. HANDLING AND STORAGE

Handling

Technical measures/Precautions	<ul style="list-style-type: none"> Use only in areas provided with adequate ventilation.
Safe handling advice	<ul style="list-style-type: none"> Wear personal protective equipment Do not breathe vapours or spray mist. Ensure that ventilation is adequate before using this product.

Storage

Technical measures/Precautions	<ul style="list-style-type: none"> Keep containers tightly closed; discard any material that may be contaminated or, which may have changed composition. Keep in properly labelled containers
Incompatible products	<ul style="list-style-type: none"> None reported
Specific use(s)	<ul style="list-style-type: none"> None

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures	<ul style="list-style-type: none"> Ensure adequate ventilation, especially in confined areas
Personal protective equipment	
Hand protection	<ul style="list-style-type: none"> Wear appropriate protective gloves
Eye protection	<ul style="list-style-type: none"> Safety glasses with side-shields or full face shield.
Respiratory protection	<ul style="list-style-type: none"> In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit
Skin and body protection	<ul style="list-style-type: none"> Long sleeved clothing boots apron
Hygiene measures	<ul style="list-style-type: none"> When using, do not eat, drink or smoke Regular cleaning of equipment, work area and clothing
Environmental exposure	<ul style="list-style-type: none"> No information available

MATERIAL SAFETY DATA SHEET MASTER IRRITANT LIQUIDS

controls

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form Liquid.
Odour Slight.

Important Health Safety and Environmental Information

pH 6.50 to 7.50
Boiling point/range 100°C
Flash point None
Vapour pressure approx. same as water.
Vapour density =water vapor.
Water solubility Infinitely soluble.
Specific Gravity approx. 1.00.

10. STABILITY AND REACTIVITY

Stability	<ul style="list-style-type: none">● Stable under normal conditions
Conditions to avoid	<ul style="list-style-type: none">● Heat, flames and sparks● Extremes of temperature and direct sunlight
Materials to avoid	<ul style="list-style-type: none">● Oxidizing agent
Hazardous decomposition products	<ul style="list-style-type: none">● HCL gas
Polymerization	<ul style="list-style-type: none">● Polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Component Information

Product Information

LD50/dermal/rat =	>2000 mg/kg
LD50/oral/rat =	>2000 mg/kg
LC50/inhalation/8h/rat =	
Local effects	
Skin irritation	May cause skin irritation.
Eye irritation	Dust may cause eye irritation.
Inhalation:	Inhalation of dust may cause irritation of respiratory tissue.
Ingestion:	Ingestion may cause irritation of mouth, throat, and upset stomach.
Sensitization	May cause sensitization of susceptible persons.
Chronic toxicity	Avoid repeated exposure.
Specific effects	
carcinogenic effects	No information available.
mutagenic effects	No information available.
Reproductive toxicity	No information available.
Target Organ Effects	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Component Information

MATERIAL SAFETY DATA SHEET MASTER IRRITANT LIQUIDS

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7783-90-6	Silver chloride	<0.2	0.1 mg/m3 TWA
12125-02-9	Ammonium chloride	<0.03	10 mg/m3 TWA (fume)
7732-18-5	Water	83-87	N/A

* ACGIH - Occupational Exposure Limits - TWA's

Product Information

Aquatic toxicity No information available.

Other information:

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	Dispose of in accordance with local regulations.
Contaminated packaging	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*
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7732-18-5	Water	83-87	N/A

* ACGIH - Occupational Exposure Limits - TWAs

International Inventories

CAS	Chemical Name	% Weight	EUOED*
6108-17-4	Acetate, lithium, dihydrate	12-16	N/A
7447-41-8	Lithium chloride	<0.5	N/A
7783-90-6	Silver chloride	<0.2	N/A
12125-02-9	Ammonium chloride	<0.03	N/A
7732-18-5	Water	83-87	N/A

* 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