

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

Product code	300-LFSA
Product name	Multi-Ion Solution Standard in Water
Common Name	Contains: 1,500 µg/mL Sulfate; 1,000 µg/mL Bromide; 500 µg/mL o-Phosphate as P; 300 µg/mL ea: Chloride, Nitrite as N, Nitrate as N; 200 µg/mL Fluoride
Manufacturer, importer, supplier	Inorganic Ventures 300 Technology Drive Christiansburg, VA 24073 Web: www.inorganicventures.com
Emergency telephone number	800-424-9300 CHEMTREC (24 hrs)

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% Weight	ACGIH*	OSHA*
7732-18-5	Water	~99.6	N/A	N/A
7758-02-3	Potassium bromide	~0.1	N/A	N/A
7778-80-5	Sulfuric acid dipotassium salt	~0.3	N/A	N/A

* ACGIH - Occupational Exposure Limits - TWAs

* OSHA - Final PELs - Time Weighted Averages (TWAs)

3. HAZARDS IDENTIFICATION

Emergency Overview	
<ul style="list-style-type: none"> Final product is not regulated 	

Eye contact	<ul style="list-style-type: none"> Contact with eyes may cause irritation
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4. FIRST AID MEASURES

General advice	<ul style="list-style-type: none"> Show this safety data sheet to the doctor in attendance
Skin contact	<ul style="list-style-type: none"> Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes
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 Keep eye wide open while rinsing If eye irritation persists, consult a specialist
Inhalation	<ul style="list-style-type: none"> Move to fresh air
Ingestion	<ul style="list-style-type: none"> If conscious, drink plenty of water Consult a physician

5. FIRE-FIGHTING MEASURES

Flash point	NA
Suitable extinguishing media	<ul style="list-style-type: none"> Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
Specific hazards	<ul style="list-style-type: none"> None
Specific methods	<ul style="list-style-type: none"> Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations
Special protective equipment for firefighters	<ul style="list-style-type: none"> As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
NFPA (National Fire Protection Association)	<ul style="list-style-type: none"> Health - 1 Fire Hazard - 0

- Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	<ul style="list-style-type: none"> • Ensure adequate ventilation
Environmental precautions	<ul style="list-style-type: none"> • Prevent further leakage or spillage if safe to do so • Prevent product from entering drains
Methods for cleaning up	<ul style="list-style-type: none"> • Dam up • Pick up and transfer to properly labelled containers • Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container • After cleaning, flush away traces with water

7. HANDLING AND STORAGE

Handling

Technical measures/Precautions	<ul style="list-style-type: none"> • Use only in area provided with appropriate exhaust ventilation
Safe handling advice	<ul style="list-style-type: none"> • Wear personal protective equipment

Storage

Technical measures/Precautions	<ul style="list-style-type: none"> • Keep in properly labelled containers • Store at room temperature in the original container • Keep containers tightly closed in a dry, cool and well-ventilated place
Incompatible products	<ul style="list-style-type: none"> • No information available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment	
Hand protection	<ul style="list-style-type: none"> • impervious gloves
Eye protection	<ul style="list-style-type: none"> • tightly fitting safety goggles
Respiratory protection	<ul style="list-style-type: none"> • Ensure adequate ventilation
Skin and body protection	<ul style="list-style-type: none"> • Chemical resistant apron • Lab coat
Hygiene measures	<ul style="list-style-type: none"> • When using, do not eat, drink or smoke • Regular cleaning of equipment, work area and clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form	liquid.
Appearance	clear
Colour	colorless.
Odour	None.

Important Health Safety and Environmental Information

pH	6 to 8
Boiling point/range	100°C
Flash point	N/A
Vapour pressure	NA.
Water solubility	miscible.

10. STABILITY AND REACTIVITY

Stability	<ul style="list-style-type: none"> • Stable under normal conditions • Hazardous polymerization does not occur
Materials to avoid	<ul style="list-style-type: none"> • No information available
Hazardous decomposition	<ul style="list-style-type: none"> • No information available

products	
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11. TOXICOLOGICAL INFORMATION

Acute toxicity

Component Information

CAS	Chemical Name	% Weight	LD50/oral/rat =	LD50/dermal/rat =
7732-18-5	Water	~99.6	N/A	N/A
7758-02-3	Potassium bromide	~0.1	Oral LD50 Rat: 3070 mg/kg	Oral LD50 Rat: 3070 mg/kg
7778-80-5	Sulfuric acid dipotassium salt	~0.3	Oral LD50 Rat: 6600 mg/kg	Oral LD50 Rat: 6600 mg/kg

Product Information

Local effects	
Eye irritation	May cause eye irritation with susceptible persons.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Component Information

CAS	Chemical Name	% Weight	EFAD*	EFFSD*	EMD - Ecotoxicity*
7732-18-5	Water	~99.6	N/A	N/A	N/A
7758-02-3	Potassium bromide	~0.1	N/A	N/A	N/A
7778-80-5	Sulfuric acid dipotassium salt	~0.3	N/A	N/A	N/A

* EFAD - Ecotoxicity - Freshwater Algae Data

* EFFSD - Ecotoxicity - Freshwater Fish Species Data

* EMD - Ecotoxicity - Microtox Data

Product Information

Do not allow material to contaminate ground water or sewage system

Other information

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products	<ul style="list-style-type: none"> In accordance with local and national regulations
Contaminated packaging	<ul style="list-style-type: none"> Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

DOT Final product is not regulated

IATA-DGR Final product is not regulated

15. REGULATORY INFORMATION

U.S. INVENTORIES:

CAS	Chemical Name	% Weight	CPCL*	NJRTK*	CERCLA/SARA*
7732-18-5	Water	~99.6	N/A	N/A	N/A
7758-02-3	Potassium bromide	~0.1	N/A	N/A	N/A
7778-80-5	Sulfuric acid dipotassium salt	~0.3	N/A	N/A	N/A

* CPCL - California - Proposition 65 - Carcinogens List

* NJRTK - New Jersey - Department of Health RTK List

* CERCLA/SARA - Hazardous Substances and their Reportable Quantities

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INTERNATIONAL INVENTORIES:

CAS	Chemical Name	% Weight	WHMIS*	EINECCS - European Union*
7732-18-5	Water	~99.6	Uncontrolled product according to WHMIS classification criteria	231-791-2
7758-02-3	Potassium bromide	~0.1	D2A	231-830-3
7778-80-5	Sulfuric acid dipotassium salt	~0.3	Uncontrolled product according to WHMIS classification criteria	231-915-5

* WHMIS - Canada - WHMIS - Classifications of Substances

* EINECCS - European Union - European inventory of Existing Commercial Chemical Substances (EINECCS)

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16. OTHER INFORMATION

The above information is believed to be accurate and represents the best information available to us. It has been compiled from the data presented in various technical publications and our experience and should only be used as a guide for handling this product. It is the user's responsibility to determine the suitability of this information for their particular purposes. We assume that only qualified individuals, trained and familiar with procedures suitable to this product will handle this material. Inorganic Ventures, Inc. assumes no responsibility and shall not be held liable for any damage resulting from misuse of this product.