

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

**Product code** ICNH41  
**Product name** 1000 µg/mL Ammonium  
**Common Name** Ammonium in Water  
**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*	ACGIH*	OSHA*	OSHA*	OSHA*	OSHA*	OSHA*
7732-18-5	Water	~95-99.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12125-02-9	Ammonium chloride	~0.1-1	10 mg/m3 TWA (fume)	20 mg/m3 STEL (fume)	N/A	N/A	N/A	N/A	N/A

\* ACGIH - Occupational Exposure Limits - TWAs

\* ACGIH - Occupational Exposure Limits - STELs

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

\* OSHA - Final PELs - Ceiling Limits

\* OSHA - Final PELs - Short Term Exposure Limits

\* OSHA - Regulated Carcinogens

\* OSHA - Select Carcinogens

**3. HAZARDS IDENTIFICATION**
**Emergency Overview**

- Final product is not regulated

<b>Eye contact</b>	<ul style="list-style-type: none"> <li>Irritating to eyes</li> </ul>
<b>Ingestion</b>	<ul style="list-style-type: none"> <li>May be harmful if swallowed</li> </ul>
<b>Inhalation</b>	<ul style="list-style-type: none"> <li>May cause irritation of respiratory tract</li> </ul>
<b>Skin contact</b>	<ul style="list-style-type: none"> <li>Substance may cause slight skin irritation</li> </ul>

**4. FIRST AID MEASURES**

<b>General advice</b>	<ul style="list-style-type: none"> <li>Show this safety data sheet to the doctor in attendance</li> </ul>
<b>Skin contact</b>	<ul style="list-style-type: none"> <li>Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes</li> </ul>
<b>Eye contact</b>	<ul style="list-style-type: none"> <li>Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes</li> <li>Keep eye wide open while rinsing</li> <li>If eye irritation persists, consult a specialist</li> </ul>
<b>Inhalation</b>	<ul style="list-style-type: none"> <li>Move to fresh air</li> </ul>
<b>Ingestion</b>	<ul style="list-style-type: none"> <li>If conscious, drink plenty of water</li> <li>Consult a physician</li> </ul>

**5. FIRE-FIGHTING MEASURES**

<b>Flash point</b>	NA
<b>Suitable extinguishing media</b>	<ul style="list-style-type: none"> <li>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment</li> </ul>
<b>Specific hazards</b>	<ul style="list-style-type: none"> <li>None</li> </ul>

<b>Specific methods</b>	<ul style="list-style-type: none"> <li>• Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations</li> </ul>
<b>Special protective equipment for firefighters</b>	<ul style="list-style-type: none"> <li>• As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear</li> </ul>
<b>NFPA (National Fire Protection Association)</b>	<ul style="list-style-type: none"> <li>• Health - 1</li> <li>• Fire Hazard - 0</li> <li>• Reactivity - 0</li> </ul>

## 6. ACCIDENTAL RELEASE MEASURES

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

## 7. HANDLING AND STORAGE

### Handling

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

### Storage

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

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General Information

<b>Form</b>	liquid.
<b>Appearance</b>	clear
<b>Colour</b>	colorless.
<b>Odour</b>	None.

### Important Health Safety and Environmental Information

<b>pH</b>	6 to 8
<b>Boiling point/range</b>	100°C
<b>Flash point</b>	N/A

Vapour pressure NA.  
Water solubility miscible.

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	<ul style="list-style-type: none"><li>Stable under normal conditions</li><li>Hazardous polymerisation does not occur</li></ul>
<b>Materials to avoid</b>	<ul style="list-style-type: none"><li>No information available</li></ul>
<b>Hazardous decomposition products</b>	<ul style="list-style-type: none"><li>No information available</li></ul>

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Component Information

CAS	Chemical Name	% Weight	LD50/oral/rat =	LD50/dermal/rat =
7732-18-5	Water	~95-99.9	N/A	N/A
12125-02-9	Ammonium chloride	~0.1-1	Oral LD50 Rat: 1650 mg/kg	Oral LD50 Rat: 1650 mg/kg

#### Product Information

<b>Local effects</b>	
<b>Eye irritation</b>	Irritant.
<b>Ingestion</b>	Moderately toxic.
<b>Inhalation</b>	May cause irritation of respiratory tract.
<b>Skin irritation</b>	May cause skin irritation and/or dermatitis.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity effects

#### Component Information

CAS	Chemical Name	% Weight	EFAD*	EFFSD*	EMD - Ecotoxicity*
7732-18-5	Water	~95-99.9	N/A	N/A	N/A
12125-02-9	Ammonium chloride	~0.1-1	N/A	24 Hr LC50 bluegill: 725 mg/L; 48 Hr LC50 carp: 109 mg/L (static); 24 Hr LC50 goldfish: 640 mg/L	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

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

## 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*	TSCA*
7732-18-5	Water	~95-99.9	N/A	N/A	N/A	Present
12125-02-9	Ammonium chloride	~0.1-1	N/A	sn 0093	5000 lb final RQ; 2270 kg final RQ	Present

\* CPCL - California - Proposition 65 - Carcinogens List

\* NJRTK - New Jersey - Department of Health RTK List

\* CERCLA/SARA - Hazardous Substances and their Reportable Quantities

\* TSCA - United States - Section 8 (b) Inventory (TSCA)

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### INTERNATIONAL INVENTORIES:

CAS	Chemical Name	% Weight	AICS - Australia*	EINECCS - European Union*	ELINCS - EU list of Notified Chemical Substances (ELINCS)	ENCS*	WHMIS*
7732-18-5	Water	~95-99.9	Present	231-791-2	N/A	N/A	Uncontrolled product according to WHMIS classification criteria
12125-02-9	Ammonium chloride	~0.1-1	Present	235-186-4	N/A	1-218	Uncontrolled product according to WHMIS classification criteria

\* AICS - Australia - Inventory of Chemical Substances (AICS)

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

\* ENCS - Japan Existing and New Chemical Substances (ENCS)

\* WHMIS - Canada - WHMIS - Classifications of Substances

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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.