

Safety Data Sheet  
According to the (US) Hazard Communication Standard (29 CFR 1910.1200)

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

<b>Product Name</b>	SPADNS Reagent (Acid Zirconyl-SPADNS Reagent)
<b>NCL Catalog Number</b>	S-78
<b>Product Description</b>	Laboratory chemical, APHA for Fluoride.
<b>Supplier</b>	
NCL of Wisconsin, Inc.	<b>Telephone:</b> 1-800-648-7836 <b>Fax:</b> 715-449-2454
P.O. Box 8	<b>Emergency Contact:</b> 1-800-424-9300 (Chemtrec)
Biramwood, WI 54414	<b>Email:</b> <a href="mailto:nclabs@nclabs.com">nclabs@nclabs.com</a>

**SECTION 2: HAZARDS IDENTIFICATION**

**GHS Classification**

Skin Corrosion	Category 1A	
Serious Eye Damage	Category 1	
Specific Target Organ Toxicity	Single Exposure Category 3	

**Signal Word**

Danger

**Hazard Statements**

H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.

**Precautionary Statements**

P260	Do not breath mist/vapors/spray.
P264	Wash exposed skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363	Wash contaminated clothing before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310	Immediately call a POISON CENTER or doctor.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to comply with local, state and federal regulations.

**Other Hazards Not Contributing to the Classification**

None under normal conditions.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Chemical Identity</b>	Not applicable
<b>Common Name</b>	Not applicable

**Mixture**

Name	CAS #	Approximate %
Water	7732-18-5	>85
Hydrochloric Acid	7647-01-0	14
Zirconyl Chloride Hydrate	13520-92-8	<0.1
SPADNS Powder	23647-14-5	<0.1

#### SECTION 4: FIRST AID MEASURES

##### Description of First Aid Measures

<b>General First Aid Measures</b>	Never give anything by mouth to an unconscious person. Seek medical advice if you feel unwell.
<b>If Inhaled</b>	Remove person to fresh air and keep comfortable for breathing. Allow victim to rest. Call a POISON CENTER or doctor if you feel unwell.
<b>In Case of Skin Contact</b>	Remove all contaminated clothing. Rinse skin with water/shower. Call a POISON CENTER or doctor if you feel unwell.
<b>In Case of Eye Contact</b>	Rinse carefully with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor if you feel unwell.
<b>If Swallowed</b>	Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor if you feel unwell.

##### Most Important Symptoms/Effects Acute and Delayed

No additional information available.

##### Indication of Immediate Medical Attention and Special Treatment Needed

Seek medical attention if exposed.

#### SECTION 5: FIRE-FIGHTING MEASURES

##### Extinguishing Media

<b>Suitable Extinguishing Media</b>	Foam. Dry powder. Sand. Carbon dioxide. Water spray.
<b>Unsuitable Extinguishing Media</b>	Do not use high pressure water stream.

##### Special Hazards Arising from the Chemical

Thermal decomposition generates corrosive vapors.

##### Special Protective Actions for Fire-Fighters

Wear self-contained breathing apparatus and protective clothing. Keep exposed containers cool with water spray.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

##### Personal Precautions, Protective Equipment and Emergency Procedures

<b>Personal Precautions</b>	Use personal protective equipment (see section 8). Evacuate area of non-essential personnel. Eliminate ignition sources. Ventilate area.
<b>Environmental Precautions</b>	Prevent entry to surface and ground waters.
<b>Methods and Materials for Containment and Cleaning Up</b>	Clean up spill with inert absorbent material. Collect spillage. Store away from other materials. Ensure compliance with local, state, and federal regulations.

#### SECTION 7: HANDLING AND STORAGE

<b>Precautions for Safe Handling</b>	Avoid contact with eyes and skin. Avoid breathing vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
<b>Conditions for Safe Storage Including any Incompatibilities</b>	Keep in a tightly closed container, stored in a cool, dry, ventilated area. Store away from sunlight, which can contribute to instability. Store away from bases, amines, alkali metals, metals, hexalithium disilicide, permanganates, e.g. potassium permanganate, and fluorine.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Control Parameters</b>	Not applicable
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**Appropriate Engineering Controls**

Material should be handled or transferred in a fume hood or with equivalent ventilation. Maintain eye-wash fountain and quick-drench facilities in work area.

**Individual Protection Measures****Eye/Face Protection**

Avoid all unnecessary exposure.

Use chemical safety goggles and /or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material.

**Skin Protection**

Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

**Respiratory Protection**

Wear appropriate mask.

**Other Information**

Do not eat, drink, or smoke when using this product.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State</b>	Liquid
<b>Color</b>	Light red
<b>Odor</b>	Not determined
<b>Odor Threshold</b>	Not determined
<b>pH</b>	0.4
<b>Melting Point/Freezing Point</b>	Not determined
<b>Initial Boiling Point and Boiling Range</b>	Not determined
<b>Flash Point</b>	Not determined
<b>Evaporation Rate</b>	Not determined
<b>Flammability (Solid, Gas)</b>	Not determined
<b>Upper/Lower Flammability/Explosive Limits</b>	Not determined
<b>Vapor Pressure</b>	Not determined
<b>Vapor Density</b>	Not determined
<b>Relative Density</b>	1.1
<b>Solubility</b>	Soluble in water.
<b>Partition Coefficient: n-octanol/water</b>	Not determined
<b>Auto-Ignition Temperature</b>	Not determined
<b>Decomposition Temperature</b>	Not determined
<b>Viscosity</b>	Not determined

**SECTION 10: STABILITY AND REACTIVITY**

<b>Reactivity</b>	No data available.
<b>Chemical Stability</b>	Stable under ordinary conditions of use and storage.
<b>Possibility of Hazardous Reactions</b>	No data available.
<b>Conditions to Avoid</b>	Extremely high or low temperatures. Heat and sunlight can contribute to instability.
<b>Incompatible Materials</b>	Bases, amines, alkali metals, metals, hexalithium disilicide, permanganates, e.g. potassium permanganate, and fluorine.
<b>Hazardous Decomposition Products</b>	No data available.

**SECTION 11: TOXICOLOGICAL INFORMATION**

<b>Acute Toxicity</b>	Not classified
<b>Hydrochloric Acid, 37% w/w (7647-01-0)</b>	
<b>LD50 oral rat</b>	700 mg/kg
<b>LD50 dermal rabbit</b>	5010 mg/kg
<b>Water (7732-18-5)</b>	
<b>LD50 oral rat</b>	≥90000 mg/kg

<b>Skin Corrosion/Irritation</b>	Causes severe skin burns.
<b>Serious Eye Damage/Irritation</b>	Causes serious eye damage.

<b>Respiratory or Skin Sensitization</b>	Not classified
<b>Germ Cell Mutagenicity</b>	Not classified
<b>Carcinogenicity</b>	Not classified
<b>Reproductive Toxicity</b>	Not classified
<b>Specific Target Organ Toxicity (Single Exposure)</b>	May cause respiratory irritation.
<b>Specific Target Organ Toxicity (Repeated Exposure)</b>	Not classified
<b>Aspiration Hazard</b>	Not classified
<b>Potential Adverse Human Health Effects and Symptoms</b>	No data available
<b>Other Information</b>	Not available

**SECTION 12: ECOLOGICAL INFORMATION**

<b>Toxicity</b>	Toxicity to fish LC50 – Gambusia affinis, 282 mg/l: 96 h
<b>Persistence and Degradability</b>	Not applicable
<b>Bioaccumulative Potential</b>	Not applicable
<b>Mobility in Soil</b>	Not applicable
<b>Other Adverse Effects</b>	Not applicable

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Methods of Disposal**

<b>Disposal Recommendations</b>	Dispose of contents/containers in accordance with local, state, and federal regulations.
<b>Other Information</b>	Avoid release to the surrounding environment.

**SECTION 14: TRANSPORT INFORMATION**

<b>UN Number</b>	1789
<b>UN Shipping Name</b>	Hydrochloric Acid solution
<b>Transport Hazard Class(es)</b>	8
<b>Packing Group</b>	II
<b>Environmental Hazards</b>	Not applicable
<b>Transport in Bulk</b>	Not applicable
<b>Other Precautions</b>	Not applicable

**SECTION 15: REGULATORY INFORMATION**

<b>Hydrochloric Acid 37% w/w (7647-01-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
RQ (Reportable Quantity)	5000 lb
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
<b>Water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

**SECTION 16: OTHER INFORMATION**

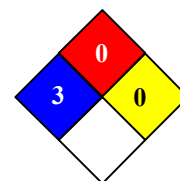
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**NFPA Hazards**

**Health Hazard** 3: Short exposure could cause serious temporary or residual injury even.

**Fire Hazard** 0: Materials that will not burn.

**Reactivity/Instability** 0: Normally stable.



**HMIS III Rating**

**Health** 3: Major injury likely unless prompt action is taken and medical treatment is given.

**Flammability** 0: Materials that will not burn.

**Physical Hazard** 0: Materials that are normally stable.

**Personal Protection** C

S-78	
Health	3
Flammability	0
Physical Hazard	0
Personal Protection	C

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**END OF SAFETY DATA SHEET**