



SAFETY DATA SHEET

Electrolyte Residue Detection Test

Section 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Electrolyte Residue Detection Test
Product form : Mixture

1.2. Relevant identified uses of the substance of mixture

Identified Uses Rapid test for the detection of electrolyte residue from lithium ion battery leaks.
Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Company : NAS-LIION LLC
c/o Nevada Management Team LTD.
1468 James Road, Gardnerville, NV 89460, USA
nasliion@outlook.com

Emergency telephone number : 973-567-0550
Other information : 973-567-0550

Section 2. Hazards identification

2.1. Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302
Skin irritation/corrosion (Category 2), H315
Causes serious eye irritation (Category 2A), H319
Long-term (chronic) aquatic hazard (Category 4), H413

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2. GHS Label elements, including precautionary statements



Hazard pictograms

Signal word Warning

Hazard statements

H302 Harmful if swallowed
H315 Causes skin irritation
H319 Causes serious eye irritation
H412 Harmful to aquatic life with long lasting effects

Precautionary statement(s)

P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/ protective clothing/ eye protection/face protection.
P273	Avoid release to the environment.
P301+P317	IF SWALLOWED: Get medical help.
P302+P352	IF ON SKIN: wash with plenty of water/...
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P317	If skin irritation occurs: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/ container to an approved waste disposal plant.

Supplemental label information

None

2.3. Other hazards

Environmental impact

Not Classified

This product does not contain any substances classified as PBT or vPvB.

Section 3. Composition/information on ingredients

3.1. Substances

Substance/mixture : Mixture

Name	Product identifier	%	Hazard Statements
Iron(III) nitrate nonahydrate	CAS-No. 7782-61-8 EC-No. 233-899-5	1 - 5%	Skin Irrit. 1B - H314 Eye Dam. 1 - H318
Potassium thiocyanate	CAS-No. 333-20-0 EC-No. 206-370-1	0.5 - 1%	Acute Tox. 4 - H302 Eye Dam. 1- H318 Aquatic Acute 2 - H401 Aquatic Chronic 3 - H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4. First aid measures

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

4.1. Description of first aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Ingestion

Rinse mouth thoroughly with water. Give plenty of water to drink. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact	May cause skin irritation
Eye contact	Irritation of eyes and mucous membranes. Prolonged contact may cause redness and/or tearing.
Ingestion	May cause discomfort if swallowed. May cause stomach pain or Vomiting

4.3. Indication of any immediate medical attention and special treatment needed

The severity of the symptoms described will vary dependent on the length of exposure.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Extinguishing media	Water, chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires. For this substance/mixture no limitations of extinguishing agents are given.
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5.2. Special hazards arising from the substance or mixture

Fire hazard	No unusual fire or explosion hazards noted.
Explosion hazard	No unusual fire or explosion hazards noted.
Hazardous combustion product	Thermal decomposition or combustion products may include the following substances: Carbon oxides, nitrous gases, nitrogen oxides, Hydrogen cyanide (hydrocyanic acid), Toxic gases or vapors.

5.3. Advice for firefighters

Advice for firefighters	Wear self-contained breathing apparatus for firefighting if necessary. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
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Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this Safety Data Sheet. Avoid contact with eyes and prolonged skin contact. Avoid substance contact. Ensure adequate ventilation.

6.2. Environmental precautions Environmental precautions

Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area.

Section 7. Handling and storage

7.1. Precautions on safe handling

Handling Technical measures	Read and follow manufacturer's recommendations.
General occupational hygiene	Avoid contact with eyes and skin contact

7.2. Conditions for safe storage, including any incompatibilities

Appropriate storage conditions	Store in a cool and well-ventilated place.
Storage class (TRGS 510): 13:	Non Combustible Solids

7.3. Specific end use(s)

Specific end use(s)	No additional information available
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Section 8. Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits Table.

Ferric nitrate nonahydrate (CAS-No. 7782-61-8)		
USA. ACGIH Threshold Limit Values (TLV)	TWA	1 mg/m ³
USA. NIOSH Recommended Exposure Limit	TWA	1 mg/m ³
California permissible exposure limits for chemical contaminants (Title 8, Article 107)	PEL	1 mg/m ³

8.2. Exposure controls

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected.

Hygiene measures

No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Red.
Odor	: Characteristic.
Odor threshold	: Not determined.
pH	: Not determined.
Melting point	: Not available.
Boiling point	: Not available
Flash point	: Not available
Evaporation rate	: Not available
Flammability (solid, gas)	: Not available.
Upper explosive limits	: Not available.
Lower explosive limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available
Density	: 1.037 @ 21°C/70°F
Solubility	: Not available.
Partition coefficient: n- octanol/water	: Not applicable.
Auto-ignition temperature	: Not applicable.
Decomposition temperature	: Not applicable.

9.2. Other information

Not available

Section 10. Stability and reactivity

Reactivity	: The product is stable and non-reactive under normal conditions.
Chemical stability	: Chemically stable and non-reactive when used as recommended
Possibility of hazardous reactions	: Risk of ignition or formation of inflammable gases or vapors with: Chlorites Generates dangerous gases or fumes in contact with: Acids Risk of explosion with: dimethyl sulfoxide, Reducing agents
Conditions to avoid	: Avoid excessive heat for prolonged periods of time.
Incompatible materials	: No additional information available
Hazardous decomposition products	: None at ambient temperatures. In the event of fire: see section 5

Section 11. Toxicological information

1. Information on toxicological effects

Acute toxicity

Conclusion/Summary : There are no data for this formulation. The information included in this section describes the potential hazards of the individual ingredients.

Component	LD ₅₀ Oral	LD ₅₀ Dermal	LC ₅₀ Inhalation
Iron(III) nitrate nonahydrate	>2000 mg/kg (Rats)	>2000 mg/kg (Rats)	-
Potassium thiocyanate	854 mg/kg (Rats)	>2000 mg/kg (Rats)	-

Toxicologically Synergistic Products No information available

Irritation/Corrosion

Skin	: May cause skin irritation.
Eyes	: Causes serious eye irritation.
Respiratory	: No known significant effects or critical hazards.

Sensitization

Skin	: No known significant effects or critical hazards.
Respiratory	: No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Carcinogenicity

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Cause damage to organs through prolonged or repeated exposure (lung)

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Section 12. Ecological information

Toxicity

Iron(III) nitrate nonahydrate	
LC ₅₀ Pseudokirchneriella subcapitata	72 hours: 130 mg/l
EC ₅₀ Daphnia magna	EC ₅₀ , 48 hours: 323 mg/l
Potassium thiocyanate	
LC ₅₀ Pseudokirchneriella subcapitata	72 hours: 234.3 mg/l
EC ₅₀ Daphnia magna	EC ₅₀ , 48 hours: 3.56 mg/l

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Not available.

Soil/water partition coefficient (KOC)

Not available.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number				
UN proper shipping name				
Transport hazard class(es)	Not regulated.	Not regulated.	Not regulated.	Not regulated.
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

Special precautions for user

: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA 311/312 Hazards	Not regulated
SARA 302	This material does not contain any components with a section 302 EHS TPQ.
SARA 313	The following components are subject to reporting levels established by SARA Title III, Section 313: Ferric nitrate nonahydrate
California Prop 65	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

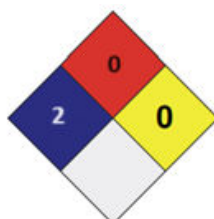
International regulation

Canada inventory	: All components are listed or exempted.
Australia inventory (AICS)	: All components are listed or exempted.
China inventory (IECSC)	: All components are listed or exempted.
Japan inventory (ENCS)	: All components are listed or exempted.
Korea inventory	: All components are listed or exempted.
New Zealand Inventory of Chemicals (NZIoC)	: All components are listed or exempted.
Philippine's inventory (PICCS)	: At least one component is not listed.
Taiwan Chemical Substances Inventory (TCSI)	: All components are listed or exempted.
Turkey inventory	: Not determined.

Section 16. Other information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	



Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.	Acute toxicity
Eye Irrit.	Eye irritation

History

Date of issue/Date of revision	: 09/22/2023
Version	: 1.0

Notice to reader

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

End of Safety Data Sheet