

SAFETY DATA SHEET

Issue Date 28-Jan-2022

Revision Date 28-Jan-2022

Version 1

1. IDENTIFICATION

Product identifier Product Name Hardness

Other means of identification

Product Code UN/ID no. Synonyms PEI-145 Final product is not regulated. None

Recommended use of the chemical and restrictions on useRecommended UseFor Laboratory Use Only. Uses advisedagainst No information available

Details of the supplier of the safety data				
sheet Manufacturer Address NS	SI Lab			
Solutions, Inc.				
7212 ACC Blvd.				
Raleigh, NC 27617				
Emergency telephone number				
Company Phone Number	800-234-7837			

	2. HAZARDS IDENTIFICATION
Emergency Telephone	919-349-7322
E-mail address	nsi@nsilabsolutions.com
Website	www.nsilabsolutions.com
FAX	919-789-3019
company i none Number	000-204-7007

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance No information available

Physical state Liquid

Odor No information available

Hazards not otherwise classified (HNOC) Not applicable

Other Information Not

applicable

Unknown acute toxicity

1.9 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Chemical Name	CAS No.	Weight-%
Water	7732-18-5	99-99.9
Magnesium chloride hexahydrate	7791-18-6	0-0.2
Calcium chloride dihydrate	10035-04-8	0-0.2
Sodium chloride	7647-14-5	0-0.2

Refer to Certificate of Analysis for exact percentage concentration.

4. FIRST AID MEASURES			
Description of first aid measures			
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.		
Skin contact	Wash skin with soap and water.		
Inhalation	Remove to fresh air.		
Ingestion	Clean mouth with water and drink afterwards plenty of water.		
Most important symptoms and effects, both acute and delayed			
Symptoms	No information available.		
Indication of any immediate medical attention and special treatment needed			

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical No

information available.

Explosion data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

 Personal precautions
 Ensure adequate ventilation, especially in confined areas.

 Environmental precautions
 Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for conta	inment and cleaning up		
Methods for containment	Prevent further leakage or spillage if safe to do so.		
Methods for cleaning up	Pick up and transfer to properly labeled containers.		
	7. HANDLING AND STORAGE		
Precautions for safe handling			
Advice on safe handling Conditions for safe storage, inc	Handle in accordance with good industrial hygiene and safety practice.		
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.		
Incompatible materials	None known based on information supplied.		

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Water 773218-5	-	-	-
Magnesium chloride hexahydrate 7791-18-6	-	-	-
Calcium chloride dihydrate 10035-04-8	-	-	-
Sodium chloride 7647-14-5	-	-	-

Appropriate engineering controls

Engineering Controls	Showers Eyewash stations Ventilation systems.		
Individual protection measures, su	ch as personal protective equipment		
Eye/face protection	No special technical protective measures are necessary.		
Skin and body protection	No special technical protective measures are necessary.		
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.		
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.		
9	9. PHYSICAL AND CHEMICAL PROPERTIES		

3. THIORAE AND ONE MORE THOP

Information on basic physical and chemical properties
Physical state
Liquid

Color

Property pH Melting point / freezing point Boiling point / boiling range Flash point **Evaporation rate**

No information available Appearance No information available Odor No information available Odor threshold No information available

Values

No information available No information available No information available No information available

Remarks · Method No information available Flammability (solid, gas) Flammability Limit in Air Upper flammability limit: Lower flammability limit: Vapor pressure Vapor density **Relative density** Water solubility Solubility in other solvents Partition coefficient Autoignition temperature **Decomposition temperature Kinematic viscosity** Dynamic viscosity

> **Explosive properties Oxidizing properties**

Other Information

Softening point Molecular weight VOC Content (%) Density **Bulk density**

No information available

No information available No information available No information available No information available No information available No information available No information available No information available No information available No information available No information available No information available

No information available No information available

No information available

No information available No information available No information available No information available

Ingestion available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50	10. STABILITY AND REACTIVITY

Reactivity No data available

Chemical stability

Stable under recommended storage conditions. Possibility of Hazardous Reactions None under normal processing. Conditions to avoid Extremes of temperature and direct sunlight. Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products None

known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product No data Information available No data

Inhalation available. No

data

Eye contact available.

No data

Skin contact available.

No data

Water 7732-18-5	-	-	-
Magnesium chloride hexahydrate 7791-18-6	= 8100 mg/kg(Rat)	-	-
Calcium chloride dihydrate 10035-04-8	-	-	-
Sodium Chloride 7647-14- 5	= 3 g/kg(Rat)	> 10 g/kg (Rabbit)	> 42 g/m³(Rat)1 h

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

SensitizationNo information available.Germ cell mutagenicityNo information available.CarcinogenicityNo information available.Reproductive toxicityNo information available.STOT - single exposureNo information available.STOT - repeated exposureNo information available.Aspiration hazardNo information available.Numerical measures of toxicity - Product Information

12. ECOLOGICAL INFORMATION

Ecotoxicity

2 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name Algae/aquatic plants		Fish	Crustacea	
Water 773218-5	-	-	-	
Magnesium chloride hexahydrate 7791-18-6	-	-	-	
Calcium chloride dihydrate 10035-04-8	-	-	-	
Sodium Chloride 7647- 14-5	-	5560 - 6080: 96 h Lepomis macrochirus mg/L LC50 flow-through 12946: 96 h Lepomis macrochirus mg/L LC50 static 6020 - 7070: 96 h Pimephales promelas mg/L LC50 static 7050: 96 h Pimephales promelas mg/L LC50 semi-static 6420 - 6700: 96 h Pimephales promelas mg/L LC50 static 4747 - 7824: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	1000: 48 h Daphnia magna mg/L EC50 340.7 - 469.2: 48 h Daphnia magna mg/L EC50 Static	

Persistence and degradability

No information available.

Bioaccumulation No information

available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations. Do not reuse container.

Contaminated packaging

Chemical Name	RCRA	RCRA - Basi i for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Water 7732-185	-	-	-	-
Magnesium chloride hexahydrate 7791-18-6	-	-	-	-
Calcium chloride dihydrate 10035-04-8	-	-	-	-
Sodium Chloride 7647- 14-5	-	-	-	-
Chemical Name			California Hazardous Waste Status	
Water 7732-185			-	
Magnesium chloride hexahydrate 7791-18-6			-	
Calcium chloride dihydrate 10035- 04-8		0035-	-	
Sodium	Chloride 7647-14- 5		-	

14. TRANSPORT INFORMATION

DOT

UN/ID no.

Not regulated Final product is not regulated.

<u>IATA</u> IMDG Not regulated Not regulated

15. REGULATORY INFORMATION

International Inventories	
TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
Legend:	

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
 Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372 SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No
NA (Clean Mater Act)	

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive

Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

	NFPA Physical and Cher	Health hazards 0 nical	Flammability 0	Instability 0
HMIS	Health hazards 0	Flammability 0	Physical hazards 0	Properties - Personal protection X
Issue Date Revision Date Revision Note No information avai	28-Jan-2022 28-Jan-2022			
Disclaimer				

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

End of Safety Data Sheet