

MOEL's Public Notice No. 2023-9 (Standards for Classification and Labeling of Chemical Substances and Safety Data Sheets)

WAI4 - KGHS - KOREAN

Issue Date 05-Sep-2019

Revision Date 18-May-2023

Revision Number 4

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Product Identifier

**Product Name** Chloride Standard

**Product No** 941706, 941707, 941708

**Pure substance/mixture** Mixture

### Relevant identified uses of the substance or mixture and uses advised against

**Recommended Use** Use as laboratory reagent

**Uses advised against** No Information available

### **Supplier**

Life Technologies Korea  
11&12 FL, Suseo Office Building  
281 Gwangpyeong-ro, Gangnam-gu  
Seoul, 135-884, Korea  
T 82.2.2023.0600

Life Technologies Corporation  
5781 Van Allen Way  
PO Box 6482  
Carlsbad, CA 92008  
+1 760 603 7200

### **E-mail address**

Chem.KR@thermofisher.com info.water@thermo.com

### Emergency Telephone Number

**Emergency telephone:** Medical: +(82) 070-7686-0086 or + 1-703-741-5970  
CHEMTREC: 1-800-424-9300 or + 1-703-527-3887  
Korea: 00-308-13-2549 (24 hours a day, 7 days a week)

**Made in USA**

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## SECTION 2: HAZARDS IDENTIFICATION

### Classification of the substance or mixture

#### Physical hazards

Based on available data, the classification criteria are not met

#### Health hazards

Based on available data, the classification criteria are not met

#### Environmental hazards

Based on available data, the classification criteria are not met

### Label Elements

Signal Word None

### Other Hazards

This product does not contain any known or suspected endocrine disruptors

### NFPA

Health  
0

Flammability  
0

Instability  
0

Physical hazards  
N/A

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

Component	Common Name	CAS No	Index No	Weight %
Water	No information available	7732-18-5	KE-35400	99 - 100
Sodium Chloride	No information available	7647-14-5	KE-31387	0.5 - 1

## SECTION 4: FIRST AID MEASURES

### Description of first aid measures

#### General Advice

Use first aid treatment according to the nature of the injury. Get medical attention immediately if symptoms occur. Show this safety data sheet to the doctor in attendance.

#### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

#### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

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Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.
Self-Protection of the First Aider	No special precautions required.

## **Most important symptoms and effects, both acute and delayed**

Most important symptoms and effects	None reasonably foreseeable
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## **Indication of any immediate medical attention and special treatment needed**

Notes to Physician	Treat symptomatically
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## **SECTION 5: FIREFIGHTING MEASURES**

### **Suitable Extinguishing Media**

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

### **Unsuitable Extinguishing Media**

No information available

### **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.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

<b>Personal Precautions</b>	Ensure adequate ventilation. Use personal protective equipment as required.
<b>Environmental Precautions</b>	Should not be released into the environment. See Section 12 for additional Ecological Information. Vapors may accumulate to form explosive concentrations.

### **Methods and Material for Containment and Cleaning Up**

Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up	Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## **SECTION 7: HANDLING AND STORAGE**

### **Precautions for Safe Handling**

Handling	Wear personal protective equipment/face protection Ensure adequate ventilation Avoid contact with skin, eyes or clothing Avoid ingestion and inhalation
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### **Conditions for Safe Storage, Including any Incompatibilities**

Storage	Keep container tightly closed in a dry and well-ventilated place
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Store at room temperature in the original container  
Protect from direct sunlight

**Incompatible Products** No information available

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Component	CAS No	Korea	ACGIH TLV	OSHA PEL
Water	7732-18-5	Not listed	Not listed	Not listed
Sodium Chloride	7647-14-5	Not listed	Not listed	Not listed

Component	CAS No	European Union	The United Kingdom	Germany
Water	7732-18-5	Not listed	Not listed	Not listed
Sodium Chloride	7647-14-5	Not listed	Not listed	Not listed

### ACGIH - Biological Exposure Indices

Component	CAS No	ACGIH - Biological Exposure Indices
Water	7732-18-5	Not listed
Sodium Chloride	7647-14-5	Not listed

### Appropriate engineering controls

**Engineering Measures** None under normal use conditions

### Individual protection measures, such as personal protective equipment

**Personal protective equipment** Use only those certified by the Korea Occupational Safety and Health Administration.

**Eye/face Protection** Wear chemical splash goggles and face shield. If splashes are likely to occur, Face protection shield.

**Skin and Body Protection** Wear protective gloves/protective clothing.

**Respiratory Protection** None under normal use conditions. In case of inadequate ventilation wear respiratory protection.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Clear
Odor	None
Odor Threshold	No information available
pH	6.5
PH Range	5.0 - 8.0

Property	Values	Remarks • Method
Melting point/freezing point	No information available	
Boiling Point/Range	~ 100 °C / 212 °F	
Flash Point (High in °C)	N/A	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	

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## Flammability Limit in Air

Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor Density	No information available
Specific Gravity	No information available
Water Solubility	Soluble
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition Temperature	-
Decomposition Temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive Properties	No information available
Oxidizing Properties	No information available

## Other Information

Softening Point	No information available
Molecular Weight	No information available
VOC Content(%)	No information available
Density	No Information available
Bulk Density	No information available

## SECTION 10: STABILITY AND REACTIVITY

### Reactivity

No Information available

### Chemical Stability

Stable under normal conditions

### Possibility of Hazardous Reactions

None under normal processing

### Conditions to Avoid

Extremes of temperature and direct sunlight.

### Incompatible Materials

No information available

### Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors.

## SECTION 11: TOXICOLOGICAL INFORMATION

### Product Information

#### Information on likely routes of exposure

Inhalation	Not an expected route of exposure.
Ingestion	No known effect based on information supplied.
Eyes	Not an expected route of exposure.
Skin	No known effect based on information supplied.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water 7732-18-5	LD50 > 90 mL/kg ( Rat )	-	-
Sodium Chloride 7647-14-5	LD50 = 3 g/kg ( Rat )	LD50 > 10000 mg/kg ( Rabbit )	LC50 > 42 mg/L ( Rat ) 1 h

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## Information on Toxicological Effects

**Symptoms** No information available

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

**Sensitization** No information available

**Mutagenic Effects** No information available

**Carcinogenicity** No information available.

**Reproductive Effects** No information available

**STOT - single exposure** No information available

**STOT - repeated exposure** No information available

**Aspiration hazard** No information available

## Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (dermal) 1001000 mg/kg

## **SECTION 12: ECOLOGICAL INFORMATION**

### Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Freshwater Algae	Freshwater Fish	Water Flea
Sodium Chloride 7647-14-5	-	LC50: 6420 - 6700 mg/L, 96h static (Pimephales promelas) LC50: 4747 - 7824 mg/L, 96h flow-through (Oncorhynchus mykiss) LC50: 6020 - 7070 mg/L, 96h static (Pimephales promelas) LC50: = 12946 mg/L, 96h static (Lepomis macrochirus) LC50: 5560 - 6080 mg/L, 96h flow-through (Lepomis macrochirus) LC50: = 7050 mg/L, 96h semi-static (Pimephales promelas)	EC50: 340.7 - 469.2 mg/L, 48h Static (Daphnia magna) EC50: = 1000 mg/L, 48h (Daphnia magna)

### Persistence and Degradability

### Bioaccumulation/ Accumulation

No information available

### Mobility

Will likely be mobile in the environment due to its water solubility.

### Other adverse effects

No information available

## **SECTION 13: DISPOSAL CONSIDERATIONS**

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## Waste treatment methods

**Waste Disposal Methods** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging** Improper disposal or reuse of this container may be dangerous and illegal.

## SECTION 14: TRANSPORT INFORMATION

**Road and Rail Transport** Not Regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated  
**Marine Pollutant** Not Applicable

**Special Precautions for User** No special precautions required

## SECTION 15: REGULATORY INFORMATION

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

**Legend:** X - Listed '-' - Not Listed

#### International Inventories

Component	CAS No	KECL	TSCA	EINECS	IECSC	DSL	NDSL	PICCS	ENCS	AICS
Water	7732-18-5	KE-35400	X	231-791-2	X	X	-	X	X	X
Sodium Chloride	7647-14-5	KE-31387	X	231-598-3	X	X	-	X	X	X

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Water	7732-18-5	Not applicable	Not applicable	Not applicable	Not applicable
Sodium Chloride	7647-14-5	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential
Water	7732-18-5	Listed	Not applicable	Not applicable
Sodium Chloride	7647-14-5	Listed	Not applicable	Not applicable

#### Korean National Regulations

Component	CAS No	Act on Registration and Evaluation of Chemical Substances (K-REACH)	Authorised Chemicals	Existing Substances Subject to Registration
Water	7732-18-5	Annex 1 - KE-35400 Exempt (Index No. 25)	Not applicable	Not applicable
Sodium Chloride	7647-14-5	Annex 1 - KE-31387	Not applicable	Not applicable

Component	CAS No	Chemical Control Act - Toxic Chemicals	Chemical Control Act - Prohibited Chemicals	Chemical Control Act - Use Restricted Chemicals
Water	7732-18-5	Not applicable	Not applicable	Not applicable
Sodium Chloride	7647-14-5	Not applicable	Not applicable	Not applicable

Component	CAS No	Chemical Control Act - Accident Precaution Chemicals (% in mixtures)	Chemical Control Act - Accident Precaution Chemicals - Quantity limits Storage (% in mixtures)	Chemical Control Act - Accident Precaution Chemicals - Quantity limits Manufacture/Use (% in mixtures)

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Water	7732-18-5	Not applicable	Not applicable	Not applicable
Sodium Chloride	7647-14-5	Not applicable	Not applicable	Not applicable

Component	CAS No	Waste Control Law	Ministry of Environment - CMR risk	Ministry of Environment - Critically Controlled Substance
Water	7732-18-5	Not applicable	Not applicable	Not applicable
Sodium Chloride	7647-14-5	Not applicable	Not applicable	Not applicable

Component	CAS No	ISHA - Harmful Agents Subject to Work Environment Monitoring	ISHA - Prohibited substances	ISHA - Substances requiring permission
Water	7732-18-5	Not applicable	Not applicable	Not applicable
Sodium Chloride	7647-14-5	Not applicable	Not applicable	Not applicable

Component	CAS No	ISHA - Substances subject to control	ISHA - Harmful Agents Requiring Health Examination	ISHA - Permissible Exposure Limits
Water	7732-18-5	Not applicable	Not applicable	Not applicable
Sodium Chloride	7647-14-5	Not applicable	Not applicable	Not applicable

Component	CAS No	ISHA - Subject to Process Safety Reports (minimum quantity)	ISHA - Threshold Limit Values (TLVs) Chemicals	ISHA - Special management materials
Water	7732-18-5	Not applicable	Not applicable	Not applicable
Sodium Chloride	7647-14-5	Not applicable	Not applicable	Not applicable

**National Fire Association - Dangerous Substances** Minimum quantity requiring a permit

Component	CAS No	Class 1 - Oxidising solids	Class 2 - Flammable solid	Class 3 - Spontaneously Combustible Substances and Dangerous Substances When Wet	Class 4 - Flammable liquids	Class 5 - Self-reactive substances	Class 6 - Oxidising liquids
Water	7732-18-5	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Sodium Chloride	7647-14-5	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

## Control Parameters

Component	CAS No	Korea	ACGIH - Biological Exposure Indices
Water	7732-18-5	Not listed	Not listed
Sodium Chloride	7647-14-5	Not listed	Not listed

## US Management Information

OSHA - Occupational Safety and Health Administration

Not applicable

Component	CAS No	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Water	7732-18-5	Not applicable	Not applicable
Sodium Chloride	7647-14-5	Not applicable	Not applicable

CERCLA

Not applicable

Component	CAS No	CERCLA EHS RQs	Hazardous Substances RQs	SARA 313 - Threshold Values %
Water	7732-18-5	Not applicable	Not applicable	Not applicable
Sodium Chloride	7647-14-5	Not applicable	Not applicable	Not applicable

**CLP Classification - Regulation (EC) No 1272/2008**



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Based on available data, the classification criteria are not met.

## SECTION 16: OTHER INFORMATION

Prepared By	Regulatory Affairs
Prepared For	Thermo Fisher Scientific Inc.©
Issue Date	05-Sep-2019
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Reason for revision	Initial Release.

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#### Disclaimer

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**End of Safety Data Sheet**