



# SAFETY DATA SHEET

Revision date 18-Jun-2025

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

### 1.1. Product identifier

**Product Name** TPN Electrolytes (Hospira, Inc.)  
**Product Code(s)** PZ03421  
**Trade Name:** Not applicable  
**Chemical Family:** Not determined

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

**Recommended Use** Pharmaceutical product

### 1.3. Details of the supplier of the safety data sheet

Hospira, A Pfizer Company  
275 North Field Drive  
Lake Forest, Illinois 60045  
1-800-879-3477

Pfizer Ireland Pharmaceuticals  
OSG Building  
Ringaskiddy, Co. Cork.  
Ireland  
+353 21 4378701

**E-mail address** pfizer-MSDS@pfizer.com

### 1.4. Emergency telephone number

**Emergency Telephone** Chemtrec 1-800-424-9300 International Chemtrec (24 hours):+1-703-527-3887

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

GHS - Classification: This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

#### OSHA Classification

**Hazards not otherwise classified (HNOC)**  
Not applicable

**Hazards classified under paragraph (d)(1)(ii) of 1910.1200**  
Not applicable

### 2.2. Label elements

**Signal word** Not classified

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## Hazard statements

Not classified in accordance with international standards for workplace safety.

## 2.3. Other hazards

### Other hazards

An Occupational Exposure Value has been established for one or more of the ingredients (see Section 8).

## PBT & vPvB

The product does not contain any substance(s) classified as PBT or vPvB.

## Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors.

## Note:

This document has been prepared in accordance with standards for workplace safety, which require the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warnings included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

#### Substances

Not applicable

### 3.2 Mixtures

#### Hazardous

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
CALCIUM CHLORIDE (CAS #: 10043-52-4)	1.7		233-140-8 (017-013-00-2)	Eye Irrit. 2 (H319)	Not classified	No data available	No data available
Sodium hydroxide (CAS #: 1310-73-2)	**	-	215-185-5 (011-002-00-6)	Skin Corr. 1A (H314)	Eye Irrit. 2 :: 0.5%<=C<2% Skin Corr. 1A :: C>=5% Skin Corr. 1B :: 2%<=C<5% Skin Irrit. 2 :: 0.5%<=C<2%	No data available	No data available
+ Hydrochloric Acid (CAS #: 7647-01-0)	**	-	231-595-7 (017-002-00-2) (017-002-01-X)	Press. Gas Skin Corr. 1A (H314) Acute Tox. 3 (H331)	Eye Irrit. 2 :: 10%<=C<25% Skin Corr. 1B :: C>=25% Skin Irrit. 2 :: 10%<=C<25% STOT SE 3 :: C>=10%	No data available	No data available

#### NonHazardous

Chemical name	Weight-%	REACH registration	EC No (EU Index No)	Classification according to	Specific concentration	M-Factor	M-Factor (long-term)
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		number		Regulation (EC) No. 1272/2008 [CLP]	limit (SCL)		
Water (CAS #: 7732-18-5)	*	-	231-791-2	Not classified	Not classified	No data available	No data available
Sodium Acetate (CAS #: 127-09-3)	12.1		204-823-8	Not classified	Not classified	No data available	No data available
POTASSIUM CHLORIDE (CAS #: 7447-40-7)	7.5		231-211-8	Acute Tox 5 (H303)	Not classified	No data available	No data available
Magnesium chloride (CAS #: 7786-30-3)	2.5		232-094-6	Not classified	Not classified	No data available	No data available
SODIUM CHLORIDE (CAS #: 7647-14-5)	1.6	-	231-598-3	Not classified	Not classified	No data available	No data available

## Full text of H- and EUH-phrases: see section 16

### Acute Toxicity Estimate

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Water 7732-18-5	89838.9	No data available	No data available	No data available	No data available
Sodium Acetate 127-09-3	3530	10000	5.6	No data available	No data available
POTASSIUM CHLORIDE 7447-40-7	3020	No data available	No data available	No data available	No data available
Magnesium chloride 7786-30-3	2800	2000	No data available	No data available	No data available
CALCIUM CHLORIDE 10043-52-4	1000	5000	No data available	No data available	No data available
SODIUM CHLORIDE 7647-14-5	3550	10000	No data available	No data available	No data available
Sodium hydroxide 1310-73-2	325	1350	No data available	No data available	No data available
+ Hydrochloric Acid 7647-01-0	238	5010	No data available	No data available	563.3022

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59).

### Additional information

+ Substance with a Union workplace exposure limit

\* Proprietary

\*\* to adjust pH

Non-hazardous ingredients provided for completeness. Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety. In accordance with 29 CFR 1910.1200, the exact percentage composition of this mixture has been withheld as a trade secret.

## Section 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

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<b>Inhalation</b>	Remove to fresh air. Seek immediate medical attention/advice.
<b>Eye contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.
<b>Ingestion</b>	Rinse mouth. Drink 1 or 2 glasses of water. If irritation or discomfort occur, obtain medical attention.

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

**Most important symptoms and effects** No data available

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

**Note to physicians** None.

## **Section 5: FIRE-FIGHTING MEASURES**

### **5.1. Extinguishing media**

**Suitable Extinguishing Media** Dry chemical, CO2, alcohol-resistant foam or water spray.

### **5.2. Special hazards arising from the substance or mixture**

**Specific hazards arising from the chemical** Not applicable.

**Hazardous combustion products** Formation of toxic gases is possible during heating or fire. May include oxides of sodium and products of chlorine

#### **Explosion data**

**Sensitivity to mechanical impact** No information available.

**Sensitivity to static discharge** No information available.

### **5.3. Advice for firefighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## **Section 6: ACCIDENTAL RELEASE MEASURES**

### **6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Minimize exposure.

**For emergency responders** Use personal protection recommended in Section 8.

### **6.2. Environmental precautions**

**Environmental precautions** Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.

### **6.3. Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

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**Methods for cleaning up** Contain the source of spill if it is safe to do so. Collect spill with absorbent material. Clean spill area thoroughly.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## **Section 7: HANDLING AND STORAGE**

### 7.1. Precautions for safe handling

**Advice on safe handling** Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing. When handling, use appropriate personal protective equipment (see Section 8). Wash thoroughly after handling. Releases to the environment should be avoided. Review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure or environmental releases. Potential points of process emissions of this material to the atmosphere should be controlled with dust collectors, HEPA filtration systems or other equivalent controls.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store as directed by product packaging.

### 7.3. Specific end use(s)

**Specific use(s)** Pharmaceutical drug product.

## **Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### 8.1. Control parameters

#### **Exposure Limits**

Refer to available public information for specific member state Occupational Exposure Limits.

#### **Sodium Acetate**

Russia MAC: 10 mg/m<sup>3</sup>

#### **POTASSIUM CHLORIDE**

Bulgaria TWA: 5.0 mg/m<sup>3</sup>;

Latvia TWA: 5 mg/m<sup>3</sup>;

Russia MAC: 5 mg/m<sup>3</sup>

#### **CALCIUM CHLORIDE**

Czech Republic 5 mg/m<sup>3</sup>

Ceiling: 4 mg/m<sup>3</sup>

Latvia TWA: 2 mg/m<sup>3</sup>;

Russia MAC: 2 mg/m<sup>3</sup>

Skin

#### **SODIUM CHLORIDE**

Latvia TWA: 5 mg/m<sup>3</sup>;

Russia MAC: 5 mg/m<sup>3</sup>

#### **Sodium hydroxide**

ACGIH OEL (Ceiling) 2 mg/m<sup>3</sup>

ACGIH TLV Ceiling: 2 mg/m<sup>3</sup>

Austria TWA-TMW: 2 mg/m<sup>3</sup>; inhalable fraction

STEL-KZGW: 4 mg/m<sup>3</sup> (8 X 5 min); inhalable fraction

Bulgaria TWA: 2.0 mg/m<sup>3</sup>; alkaline aerosols

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Czech Republic	1 mg/m <sup>3</sup>
Denmark	Ceiling: 2 mg/m <sup>3</sup>
Estonia	Ceiling: 2 mg/m <sup>3</sup> ; TWA: 1 mg/m <sup>3</sup> ; STEL: 2 mg/m <sup>3</sup> ;
Finland	Ceiling: 2 mg/m <sup>3</sup> ;
France	2 mg/m <sup>3</sup>
Hungary	TWA-AK: 1 mg/m <sup>3</sup> ; STEL-CK: 2 mg/m <sup>3</sup> ;
Ireland	STEL: 2 mg/m <sup>3</sup> ;
Ceiling Limit Value	2 mg/m <sup>3</sup>
Latvia	TWA: 0.5 mg/m <sup>3</sup> ;
Poland	TWA-NDS: 0.5 mg/m <sup>3</sup> ; STEL-NDSch: 1 mg/m <sup>3</sup> ;
Romania	TWA: 1 mg/m <sup>3</sup> ;
Slovakia	STEL: 3 mg/m <sup>3</sup> ;
Spain	TWA: 2 mg/m <sup>3</sup> ;
Switzerland	STEL (VLA-EC): 2 mg/m <sup>3</sup> ; TWA-MAK: 2 mg/m <sup>3</sup> ; inhalable dust STEL-KZGW: 2 mg/m <sup>3</sup> ; inhalable dust
OSHA PEL	TWA: 2 mg/m <sup>3</sup> (vacated) Ceiling: 2 mg/m <sup>3</sup>
United Kingdom	STEL: 2 mg/m <sup>3</sup> ;
<b>+ Hydrochloric Acid</b>	
ACGIH OEL (Ceiling)	2 ppm
ACGIH TLV	Ceiling: 2 ppm
Austria	TWA-TMW: 5 ppm; TWA-TMW: 8 mg/m <sup>3</sup> ; STEL-KZGW: 10 ppm (8 X 5 min); STEL-KZGW: 15 mg/m <sup>3</sup> (8 X 5 min);
Bulgaria	TWA: 5 ppm; TWA: 8.0 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15.0 mg/m <sup>3</sup> ;
Czech Republic	8 mg/m <sup>3</sup>
Denmark	Ceiling: 15 mg/m <sup>3</sup>
Estonia	STEL: 5 ppm; STEL: 8 mg/m <sup>3</sup> ; TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;
European Union	TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;
Finland	STEL: 5 ppm; STEL: 7.6 mg/m <sup>3</sup> ;
Germany DFG	TWA-MAK: 2 ppm; I(2); TWA-MAK: 3.0 mg/m <sup>3</sup> ; I(2); Peak: 4 ppm; Peak: 6 mg/m <sup>3</sup> ;
Germany TRGS	TWA-AGW; 2 ppm (exposure factor 2); TWA-AGW; 3 mg/m <sup>3</sup> (exposure factor 2);
Hungary	TWA-AK: 8 mg/m <sup>3</sup> ; TWA-AK: 5 ppm; STEL-CK: 165 mg/m <sup>3</sup> ; STEL-CK: 10 ppm;

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Ireland	TWA: 8 mg/m <sup>3</sup> ; TWA: 5 ppm; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;
Italy MDLPS	TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;
Ceiling Limit Value	2 ppm 3.0 mg/m <sup>3</sup>
Latvia	TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;
Netherlands	TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;
Poland	TWA-NDS: 5 mg/m <sup>3</sup> ; STEL-NDSch: 10 mg/m <sup>3</sup> ;
Romania	TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;
Russia	MAC: 5 mg/m <sup>3</sup>
Slovakia	TWA: 5 ppm; TWA: 8.0 mg/m <sup>3</sup> ; Ceiling: 15 mg/m <sup>3</sup> ;
Spain	TWA-(VLA-ED): 5 ppm; TWA-(VLA-ED): 7.6 mg/m <sup>3</sup> ; STEL (VLA-EC): 10 ppm; STEL (VLA-EC): 15 mg/m <sup>3</sup> ;
Switzerland	TWA-MAK: 2 ppm; TWA-MAK: 3 mg/m <sup>3</sup> ; STEL-KZGW: 4 ppm; STEL-KZGW: 6 mg/m <sup>3</sup> ;
U.S. - OSHA - Final PELs - Ceiling Limits	5 ppm 7 mg/m <sup>3</sup>
OSHA PEL	Ceiling: 5 ppm Ceiling: 7 mg/m <sup>3</sup> (vacated) Ceiling: 5 ppm (vacated) Ceiling: 7 mg/m <sup>3</sup>
United Kingdom	TWA: 1 ppm; gas and aerosol mist TWA: 2 mg/m <sup>3</sup> ; gas and aerosol mist STEL: 5 ppm; gas and aerosol mist STEL: 8 mg/m <sup>3</sup> ; gas and aerosol mist

## Pfizer Occupational Exposure Band (OEB) Statement:

The purpose of the Occupational Exposure Band (OEB) classification system is to separate substances into different Hazard categories when the available data are sufficient to do so, but inadequate to establish an Occupational Exposure Limit (OEL). The OEB given is based upon an analysis of all currently available data; as such, this value may be subject to revision when new information becomes available.

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## 8.2. Exposure controls

<b>Engineering controls</b>	Engineering controls should be used as the primary means to control exposures. General room ventilation is adequate unless the process generates dust, mist or fumes. Keep airborne contamination levels below the exposure limits listed above in this section.
<b>Personal protective equipment</b>	Refer to applicable national standards and regulations in the selection and use of personal protective equipment (PPE). Contact your safety and health professional or safety equipment supplier for assistance in selecting the correct protective clothing/equipment based on an assessment of the workplace conditions, other chemicals used or present in the workplace and specific operational processes.
<b>Eye/face protection</b>	Wear safety glasses or goggles if eye contact is possible. (Eye protection must meet the standards in accordance with EN166, ANSI Z87.1 or international equivalent.).
<b>Hand protection</b>	Impervious gloves (e.g. Nitrile, etc.) are recommended if skin contact with drug product is possible and for bulk processing operations. (Protective gloves must meet the standards in accordance with EN374, ASTM F1001 or international equivalent.).
<b>Skin and body protection</b>	Impervious protective clothing is recommended if skin contact with drug product is possible and for bulk processing operations. (Protective clothing must meet the standards in accordance with EN13982, ANSI 103 or international equivalent.).
<b>Respiratory protection</b>	Under normal conditions of use, if the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the OEL (e.g. particulate respirator with a half mask, P3 filter). (Respirators must meet the standards in accordance with EN140, EN143, ASTM F2704-10 or international equivalent.).
<b>Thermal hazards</b>	No information available.
<b>Environmental exposure controls</b>	No information available.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Color</b>	Clear, colorless
<b>Odor</b>	No information available.
<b>Odor threshold</b>	No information available
<b>Property</b>	<b>Values</b>
<b>Melting point / freezing point</b>	No data available
<b>Boiling point or initial boiling point and boiling range</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Lower and upper explosion limit/flammability limit</b>	
Lower explosion limit	No data available
Upper explosion limit	No data available
<b>Flash point</b>	No data available
<b>Autoignition temperature</b>	No data available
<b>Decomposition temperature</b>	
SADT (°C)	No data available
<b>pH</b>	6.0-7.5
pH (as aqueous solution)	No data available



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Kinematic viscosity	No data available
Dynamic viscosity	No data available
Solubility	No data available Soluble
Vapor pressure	No data available
Density and/or relative density	No data available
Bulk density	No data available
Liquid Density	No data available
Vapor density	No data available
Particle characteristics	
Particle Size	No information available
Particle Size Distribution	No information available

## 9.2. Other information

Molecular formula	Mixture
Molecular weight	Mixture

### 9.2.1. Information with regard to physical hazard classes

Oxidizing properties	None
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### 9.2.2. Other safety characteristics

No information available

## **Section 10: STABILITY AND REACTIVITY**

### 10.1. Reactivity

Reactivity	No information available.
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### 10.2. Chemical stability

Stability	Stable under normal conditions.
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### Explosion data

Sensitivity to mechanical impact	No information available.
Sensitivity to static discharge	No information available.

### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No information available.
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### 10.4. Conditions to avoid

Conditions to avoid	None known.
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### 10.5. Incompatible materials

Incompatible materials	None known.
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### 10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition products include oxides of nitrogen, carbon monoxide, carbon dioxide, and halogen containing gases.
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## **Section 11: TOXICOLOGICAL INFORMATION**

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

General Information:	The information included in this section describes the potential hazards of the individual ingredients
Short term	May cause eye irritation (based on components)
Known Clinical Effects:	The most common adverse effects seen during clinical use of this drug include changes in electrolytes

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<b>Acute toxicity</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.
<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Respiratory or skin sensitization</b>	Based on available data, the classification criteria are not met.
<b>STOT - single exposure</b>	Based on available data, the classification criteria are not met.
<b>STOT - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.

## Acute Toxicity: (Species, Route, End Point, Dose)

### Sodium Acetate

Rat Oral LD 50 3500 mg/kg  
Mouse Oral LD 50 4960 mg/kg

### POTASSIUM CHLORIDE

Rat Oral LD50 3020 mg/kg

### SODIUM CHLORIDE

Rat Sub-tenon injection (eye) LC50/1hr > 42 g/m<sup>3</sup>

Rat Oral LD 50 3 g/kg  
Mouse Oral LD 50 4 g/kg  
Rabbit Dermal LD 50 > 10 g/kg

### Sodium hydroxide

Mouse IP LD50 40 mg/kg

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg ( Rat )	-	-
Sodium Acetate	= 3530 mg/kg ( Rat )	> 10 g/kg ( Rabbit )	> 5.6 mg/L ( Rat ) 4 h
POTASSIUM CHLORIDE	= 2600 mg/kg ( Rat )	-	-
Magnesium chloride	= 2800 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	-
CALCIUM CHLORIDE	= 1000 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	-
SODIUM CHLORIDE	= 3550 mg/kg ( Rat )	> 10000 mg/kg ( Rabbit )	> 42 mg/L ( Rat ) 1 h
Sodium hydroxide	= 325 mg/kg ( Rat )	= 1350 mg/kg ( Rabbit )	-
+ Hydrochloric Acid	238 - 277 mg/kg ( Rat )	> 5010 mg/kg ( Rabbit )	= 1.68 mg/L ( Rat ) 1 h

**Acute Toxicity Comments:** A greater than symbol (>) indicates that the toxicity endpoint being tested was not achievable at the highest dose used in the test.

## Irritation / Sensitization: (Study Type, Species, Severity)

### POTASSIUM CHLORIDE

Eye Irritation Rabbit Mild

### SODIUM CHLORIDE

Skin irritation Rabbit Mild

Eye irritation Rabbit Mild

### + Hydrochloric Acid

Skin irritation Severe

Eye irritation Severe

### Sodium hydroxide

Eye Irritation Rabbit Severe

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Skin Irritation Rabbit Severe

## Genetic Toxicity: (Study Type, Cell Type/Organism, Result)

### + Hydrochloric Acid

Bacterial Mutagenicity (Ames) *Salmonella* Negative  
*In Vivo* Micronucleus Rat Negative

## **Carcinogenicity**

None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA.

### + Hydrochloric Acid

IARC

Group 3

## 11.2. Information on other hazards

### 11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** Based on available data, the classification criteria are not met.

### 11.2.2. Other information

**Other adverse effects**

No information available.

## **Section 12: ECOLOGICAL INFORMATION**

### **Environmental Overview:**

Environmental properties have not been thoroughly investigated. Releases to the environment should be avoided.

### 12.1. Toxicity

## Aquatic Toxicity: (Species, Method, End Point, Duration, Result)

### POTASSIUM CHLORIDE

*Gambusia affinis* (Mosquitofish) LC50 96 hours 920 mg/L  
*Lepomis macrochirus* (Bluegill Sunfish) LC50 96 hours 2010 mg/L  
*Daphnia Magna* (Water Flea) EC50 48 hours 825 mg/L  
*Scenedesmus subspicatus* (Green Alga) EC50 72 hours 2500 mg/L

### 12.2. Persistence and degradability

**Persistence and degradability**

No information available.

### 12.3. Bioaccumulative potential

**Bioaccumulation**

No information available.

### 12.4. Mobility in soil

**Mobility in soil**

No information available.

### 12.5. Results of PBT and vPvB assessment

**PBT and vPvB assessment**

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Chemical name	PBT and vPvB assessment
Sodium Acetate	Not PBT/vPvB PBT assessment does not apply
POTASSIUM CHLORIDE	Not PBT/vPvB PBT assessment does not apply
Magnesium chloride	Not PBT/vPvB PBT assessment does not apply
CALCIUM CHLORIDE	Not PBT/vPvB PBT assessment does not apply
SODIUM CHLORIDE	Not PBT/vPvB PBT assessment does not apply
+ Hydrochloric Acid	Not PBT/vPvB PBT assessment does not apply
Sodium hydroxide	Not PBT/vPvB PBT assessment does not apply

## 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** Based on available data, the classification criteria are not met.

## 12.7. Other adverse effects

**Other adverse effects** No information available.

**PMT or vPvM properties** Based on available data, the classification criteria are not met.

## Section 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

#### Waste from residues/unused products

Dispose of waste in accordance with all applicable laws and regulations. Member State specific and Community specific provisions must be considered. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural wastewater and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater.

## Section 14: TRANSPORT INFORMATION

The following refers to all modes of transportation unless specified below.

**Not regulated for transport under USDOT, EUADR, IATA, or IMDG regulations.**

**UN number:** Not applicable

**UN proper shipping name:** Not applicable

**Transport hazard class(es):** Not applicable

**Packing group:** Not applicable

**Environmental Hazard(s):** Not applicable

## Section 15: REGULATORY INFORMATION

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

Water

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<b>CERCLA/SARA Section 313 de minimus %</b>	Not Listed
<b>California Proposition 65</b>	Not Listed
<b>TSCA</b>	Present
<b>EINECS</b>	231-791-2
<b>AICS</b>	Present
Sodium Acetate	
<b>CERCLA/SARA Section 313 de minimus %</b>	Not Listed
<b>California Proposition 65</b>	Not Listed
<b>TSCA</b>	Present
<b>EINECS</b>	204-823-8
<b>AICS</b>	Present
POTASSIUM CHLORIDE	
<b>CERCLA/SARA Section 313 de minimus %</b>	Not Listed
<b>California Proposition 65</b>	Not Listed
<b>TSCA</b>	Present
<b>EINECS</b>	231-211-8
<b>AICS</b>	Present
<b>Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)</b>	Schedule 4
Magnesium chloride	
<b>CERCLA/SARA Section 313 de minimus %</b>	Not Listed
<b>California Proposition 65</b>	Not Listed
<b>TSCA</b>	Present
<b>EINECS</b>	232-094-6
<b>AICS</b>	Present
CALCIUM CHLORIDE	
<b>CERCLA/SARA Section 313 de minimus %</b>	Not Listed
<b>California Proposition 65</b>	Not Listed
<b>TSCA</b>	Present
<b>EINECS</b>	233-140-8
<b>AICS</b>	Present
SODIUM CHLORIDE	
<b>CERCLA/SARA Section 313 de minimus %</b>	Not Listed
<b>California Proposition 65</b>	Not Listed
<b>TSCA</b>	Present
<b>EINECS</b>	231-598-3
<b>AICS</b>	Present
Sodium hydroxide	
<b>CERCLA/SARA Section 313 de minimus %</b>	Not Listed
<b>Hazardous Substances RQs</b>	1000 lb
<b>California Proposition 65</b>	Not Listed
<b>TSCA</b>	Present
<b>EINECS</b>	215-185-5
<b>AICS</b>	Present
<b>Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)</b>	Schedule 5 Schedule 6
+ Hydrochloric Acid	
<b>CERCLA/SARA Section 313 de minimus %</b>	1.0 %
<b>Hazardous Substances RQs</b>	5000 lb
<b>California Proposition 65</b>	Not Listed
<b>TSCA</b>	Present
<b>EINECS</b>	231-595-7
<b>AICS</b>	Present
<b>Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)</b>	Schedule 5 Schedule 6

**National regulations**  
**France**

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## Occupational Illnesses (R-463-3, France)

Chemical name	French RG number
POTASSIUM CHLORIDE 7447-40-7	RG 67
SODIUM CHLORIDE 7647-14-5	RG 78

## Germany

### Chemical Prohibition Ordinance (ChemVerbotsV)

Not applicable

## TRGS 905

Not applicable

## Switzerland

Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) SR 814.018 Not applicable

Storage of Hazardous Material

Not applicable

WPO (GSchV) SR 814.201; WPA (GSchG) SR 814.20

Not applicable

Major Accidents Ordinance SR 814.012

Not applicable

## European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

### Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
CALCIUM CHLORIDE 10043-52-4	75	-
Sodium hydroxide 1310-73-2	75	-
+ Hydrochloric Acid 7647-01-0	75	-

## Persistent Organic Pollutants

Not applicable

## Named dangerous substances per Seveso Directive (2012/18/EU)

Chemical name	Lower-tier requirements (tons)	Upper-tier requirements (tons)
+ Hydrochloric Acid 7647-01-0	25	250

## Ozone-depleting substances (ODS) Regulation (EU) 2024/590

Not applicable.

## EU - Plant Protection Products (1107/2009/EC)

Chemical name	EU - Plant Protection Products (1107/2009/EC)
SODIUM CHLORIDE 7647-14-5	Plant protection agent

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Sodium Acetate 127-09-3	Simplified procedure - Category 1
SODIUM CHLORIDE	Product-type 1: Human hygiene

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7647-14-5	
+ Hydrochloric Acid 7647-01-0	Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals

## Explosives Precursors Marketing and Use (2019/1148)

Not applicable

### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing Chemicals Inventory  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances  
**NZIoC** - New Zealand Inventory of Chemicals  
**TCSI** - Taiwan Chemical Substance Inventory

## 15.2. Chemical safety assessment

**Chemical Safety Report** No information available

## Section 16: OTHER INFORMATION

### Key or legend to abbreviations and acronyms used in the safety data sheet

### Full text of any hazard and/or precautionary statements referred to under Sections 2-15

H314 - Causes severe skin burns and eye damage. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation.

**Data Sources:** Pfizer proprietary drug development information. Publicly available toxicity information.

**Reason for revision** Updated Section 1 - Identification of the Substance/Preparation and the Company/Undertaking. Updated Section 2 - Hazard Identification. Updated Section 3 - Composition / Information on Ingredients. Updated Section 11 - Toxicology Information. Updated Section 12 - Ecological Information. Updated Section 15 - Regulatory Information.

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**Prepared By** Pfizer Global Environment, Health, and Safety

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