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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

Product Identifier

Material Name: CHROMIUM (Chromic Chloride Injection, USP) (Hospira, Inc.)

Trade Name: CHROMIUM (Chromic Chloride Injection, USP)

Chemical Family: Not determined

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Intended Use: Pharmaceutical product

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

Hospira UK Limited

Horizon Honey Lane Hurley

Maidenhead, SL6 6RJ United Kingdom

Emergency telephone number:

International CHEMTREC (24 hours): +1-703-527-3887

Emergency telephone number: CHEMTREC (24 hours): 1-800-424-9300

Contact E-Mail: pfizer-MSDS@pfizer.com

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS - Classification Not classified as hazardous

Label Elements

Signal Word: Not Classified

Hazard Statements: Not classified in accordance with international standards for workplace safety.

Other Hazards An Occupational Exposure Value has been established for one or more of the ingredients (see

Section 8).

Note: This document has been prepared in accordance with standards for workplace safety, which

requires the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warning included may not apply in all cases.

Your needs may vary depending upon the potential for exposure in your workplace.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous

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Ingredient	CAS Number	EU EINECS/ELINCS List	GHS Classification	%
Sodium hydroxide	1310-73-2	215-185-5	Skin Corr.1A (H314)	**
Hydrochloric Acid	7647-01-0	231-595-7	Press. Gas Skin Corr.1A (H314) Acute Tox.3 (H331)	**
Chromic chloride	10025-73-7	233-038-3	Acute Tox. 4 (H302)	0.002

Ingredient	CAS Number	EU	GHS Classification	%
		EINECS/ELINCS List		
Sodium chloride	7647-14-5	231-598-3	Not Listed	*

Additional Information: * Proprietary

** to adjust pH

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.

For the full text of the CLP/GHS abbreviations mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of First Aid Measures

Eye Contact: Flush with water while holding eyelids open for at least 15 minutes. Seek medical attention

immediately.

Skin Contact: Remove contaminated clothing. Flush area with large amounts of water. Use soap. Seek

medical attention.

Ingestion: Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not

induce vomiting unless directed by medical personnel. Seek medical attention immediately.

Inhalation: Remove to fresh air and keep patient at rest. Seek medical attention immediately.

Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms and Effects of

No data available

Exposure:

Medical Conditions None known

Aggravated by Exposure:

Indication of the Immediate Medical Attention and Special Treatment Needed

Notes to Physician: Non-

5. FIRE FIGHTING MEASURES

Extinguishing Media: Extinguish fires with CO2, extinguishing powder, foam, or water.

Special Hazards Arising from the Substance or Mixture

Hazardous Combustion Formation of toxic gases is possible during heating or fire.

Products:

Fire / Explosion Hazards: Fine particles (such as dust and mists) may fuel fires/explosions.

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Advice for Fire-Fighters

During all fire fighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

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

Environmental Precautions

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

Methods and Material for Containment and Cleaning Up

Measures for Cleaning / Collecting:

Contain the source of the spill or leak. Absorb spills with non-combustible absorbent material and transfer into a labeled container for disposal. Clean spill area thoroughly. Prevent

discharge to

Additional Consideration for

Large Spills:

Non-essential personnel should be evacuated from affected area. Report emergency situations immediately. Clean up operations should only be undertaken by trained personnel.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid breathing mist or aerosols. Avoid contact with eyes, skin and clothing. When handling, use appropriate personal protective equipment (see Section 8). Wash hands and any exposed skin after removal of PPE. 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.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions: Store as directed by product packaging.

Specific end use(s): Pharmaceutical drug product

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Sodium chloride

Latvia OEL - TWA 5 mg/m³
Lithuania OEL - TWA 5 mg/m³

Sodium hydroxide

ACGIH Ceiling Threshold Limit: 2 mg/m^3 2 mg/m^3 Australia PEAK 2 mg/m³ Austria OEL - MAKs 2.0 mg/m³ **Bulgaria OEL - TWA** Czech Republic OEL - TWA 1 mg/m^3 Estonia OEL - TWA 1 mg/m^3 France OEL - TWA 2 mg/m³ **Greece OEL - TWA** 2 mg/m³ **Hungary OEL - TWA** 2 ma/m3 2 mg/m³ Japan - OELs - Ceilings 0.5 mg/m^{3} **Latvia OEL - TWA OSHA - Final PELS - TWAs:** 2 mg/m^3

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oland OEL - TWA	0.5 mg/m ³
Slovakia OEL - TWA	2 mg/m³
Slovenia OEL - TWA	2 mg/m ³
Sweden OEL - TWAs	1 mg/m ³
Switzerland OEL -TWAs	2 mg/m ³
	ŭ
ochloric Acid	
ACGIH Ceiling Threshold Limit:	2 ppm
Australia PEAK	5 ppm
	7.5 mg/m ³
Austria OEL - MAKs	5 ppm
	8 mg/m ³
Belgium OEL - TWA	5 ppm
-	8 mg/m³
Bulgaria OEL - TWA	5 ppm
-	8.0 mg/m ³
Cyprus OEL - TWA	5 ppm
	8 mg/m ³
Czech Republic OEL - TWA	8 mg/m ³
Estonia OEL - TWA	5 ppm
	8 mg/m³
Germany - TRGS 900 - TWAs	2 ppm
•	3 mg/m³
Germany (DFG) - MAK	2 ppm
	3.0 mg/m ³
Greece OEL - TWA	5 ppm
	7 mg/m³
Hungary OEL - TWA	8 mg/m³
Ireland OEL - TWAs	5 ppm
	8 mg/m³
Italy OEL - TWA	5 ppm
	8 mg/m³
Japan - OELs - Ceilings	2 ppm
	3.0 mg/m ³
Latvia OEL - TWA	5 ppm
	8 mg/m³
Lithuania OEL - TWA	5 ppm
	8 mg/m³
Luxembourg OEL - TWA	5 ppm
	8 mg/m³
Malta OEL - TWA	5 ppm
	8 mg/m ³
Netherlands OEL - TWA	8 mg/m ³
Poland OEL - TWA	5 mg/m³
Portugal OEL - TWA	5 ppm
	8 mg/m³
Romania OEL - TWA	5 ppm
	8 mg/m³
Slovakia OEL - TWA	5 ppm
	8.0 mg/m ³
Slovenia OEL - TWA	5 ppm
	8 mg/m ³

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Spain OEL - TWA 5 ppm

7.6 mg/m³

Switzerland OEL -TWAs 2 ppm

3.0 mg/m³

Vietnam OEL - TWAs 5 mg/m³

Chromic chloride

Pfizer OEL TWA-8 Hr: 500μg/m³
ACGIH Threshold Limit Value (TWA) 0.5 mg/m³

Exposure Controls

Engineering Controls: 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.

Personal Protective

Equipment:

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.

Hands: 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.)

Eyes: 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.)

Skin: 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.)

Respiratory protection: 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.)

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:SolutionColor:Clear, colorlessOdor:No data available.Odor Threshold:No data available.

Molecular Formula: Mixture Molecular Weight: Mixture

Solvent Solubility:

Water Solubility:

No data available

No data available

pH: 1.5-2.5

Melting/Freezing Point (°C):

Boiling Point (°C):

No data available.

No data available.

Partition Coefficient: (Method pH Endpoint Value)

Partition Coefficient: (Method, pH, Endpoint, Value) Chromic chloride No data available

Sodium chloride
No data available
Sodium hydroxide
No data available

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9. PHYSICAL AND CHEMICAL PROPERTIES

Hydrochloric Acid
No data available

Decomposition Temperature (°C): No data available.

Evaporation Rate (Gram/s):No data availableVapor Pressure (kPa):No data availableVapor Density (g/ml):No data availableRelative Density:No data availableViscosity:No data available

Flammablity:

Autoignition Temperature (Solid) (°C):

Flammability (Solids):

Flash Point (Liquid) (°C):

Upper Explosive Limits (Liquid) (% by Vol.):

Lower Explosive Limits (Liquid) (% by Vol.):

No data available
No data available
No data available

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical Stability: Stable under normal conditions of use.

Possibility of Hazardous Reactions

Oxidizing Properties: No data available

Conditions to Avoid: Fine particles (such as dust and mists) may fuel fires/explosions. **Incompatible Materials:** As a precautionary measure, keep away from strong oxidizers

Hazardous Decomposition No data available

Products:

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

General Information:

The information included in this section describes the potential hazards of the individual

ingredients.

Known Clinical Effects:

Individuals sensitive to this material or other materials in its chemical class may develop allergic reactions. Acute potential health effect could include skin and eye irritation, gastric irritation; nausea, vomiting and diarrhea (if swallowed), nose and throat irritation (if inhaled).

Prolonged or repeated ingestion may cause kidney damage.

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

Chromic chloride

Rat Oral LD50 1790 mg/kg

Sodium chloride

Rat Oral LD50 3000 mg/kg Mouse Oral LD50 4000 mg/kg

Sodium hydroxide

Mouse IP LD50 40 mg/kg

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

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11. TOXICOLOGICAL INFORMATION

Sodium chloride

Eye Irritation Rabbit Moderate Skin Irritation Rabbit Mild

Sodium hydroxide

Eye Irritation Rabbit Severe Skin Irritation Rabbit Severe

Hydrochloric Acid

Skin Irritation Severe Eye Irritation Severe

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

Chromic chloride

Bacterial Mutagenicity (Ames) Salmonella Negative

Mouse Lymphoma Assay Negative

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

Chromic chloride

IARC: Group 3 (Not Classifiable)

Hydrochloric Acid

IARC: Group 3 (Not Classifiable)

12. ECOLOGICAL INFORMATION

Environmental Overview: Environmental properties have not been investigated.

Toxicity: No data available

Persistence and Degradability: No data available

Bio-accumulative Potential: No data available

Mobility in Soil: No data available

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13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods: 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 waste water 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.

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.

15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Sodium chloride

CERCLA/SARA 313 Emission reporting

California Proposition 65

Inventory - United States TSCA - Sect. 8(b)

Australia (AICS):

Present

EU EINECS/ELINCS List

Not Listed

Not Listed

Not Listed

Not Listed

Not Listed

Not Listed

Not Eisted

Not

Sodium hydroxide

CERCLA/SARA 313 Emission reporting Not Listed **CERCLA/SARA Hazardous Substances** 1000 lb and their Reportable Quantities: 454 kg **California Proposition 65** Not Listed Inventory - United States TSCA - Sect. 8(b) Present Present Australia (AICS): Schedule 5 Standard for the Uniform Scheduling for Drugs and Poisons: Schedule 6 215-185-5 **EU EINECS/ELINCS List**

Hydrochloric Acid

CERCLA/SARA 313 Emission reporting
CERCLA/SARA Hazardous Substances
5000 lb
and their Reportable Quantities:
2270 kg
CERCLA/SARA - Section 302 Extremely Hazardous
TPQs
500 lb

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15. REGULATORY INFORMATION

CERCLA/SARA - Section 302 Extremely Hazardous 5000 lb

Substances EPCRA RQs

California Proposition 65
Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
Standard for the Uniform Scheduling
for Drugs and Poisons:
Schedule 6
EU EINECS/ELINCS List
Not Listed
Present
Schedule 5
Schedule 6
231-595-7

Chromic chloride

CERCLA/SARA 313 Emission reporting

CERCLA/SARA - Section 302 Extremely Hazardous

TPQs

1 lb

CERCLA/SARA - Section 302 Extremely Hazardous

1 lb

Substances EPCRA RQs

California Proposition 65
Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
Present
EU EINECS/ELINCS List
233-038-3

16. OTHER INFORMATION

Text of CLP/GHS Classification abbreviations mentioned in Section 3

Acute toxicity, oral-Cat.4; H302 - Harmful if swallowed Acute toxicity, inhalation-Cat.3; H331 - Toxic if inhaled

Skin corrosion/irritation-Cat.1A; H314 - Causes severe skin burns and eye damage

Data Sources: Publicly available toxicity information.

Reasons for Revision: Updated Section 2 - Hazard Identification. Updated Section 8 - Exposure Controls / Personal

Protection. Updated Section 1 - Identification of the Substance/Preparation and the

Company/Undertaking.

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Product Stewardship Hazard Communication

Prepared by: Pfizer Global Environment, Health, and Safety Operations

Pfizer Inc believes that the information contained in this Material Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time.

End of Safety Data Sheet