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

Product Identifier

Material Name: Bupivacaine Hydrochloride Injection (Hospira, Inc.)

Trade Name: MARCAINE; MARCAINE SPINAL

Synonyms: Bupivacaine Spinal (Bupivacine in Dextrose, USP)

Chemical Family: Not determined

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

Intended Use: Pharmaceutical product used as anesthetic agent

Details of the Supplier of the Safety Data Sheet

Hospira, A Pfizer Company

Hospira UK Limited

Prizer Company

Hospira UK Limited

Horizon

Lake Forest, Illinois 60045

1-800-879-3477

Honey Lane
Hurley

Maidenhead, SL6 6RJ United Kingdom

Emergency telephone number: Emergency telephone number:

CHEMTREC (24 hours): 1-800-424-9300 International CHEMTREC (24 hours): +1-703-527-3887

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

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture GHS - Classification

Acute Oral Toxicity: Category 4

Label Elements

Signal Word: Warning

Hazard Statements: H302 - Harmful if swallowed

Precautionary Statements: P264 - Wash hands thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P301+ P312 - IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel

unwell

P330 - Rinse mouth

P501 - Dispose of contents/container in accordance with all local and national regulations

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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

| Ingredient | CAS Number | EU EINECS/ELINCS List | GHS Classification | % |
|---------------------------|------------|-----------------------------|----------------------|------------|
| HYDROCHLORIC ACID | 7647-01-0 | 231-595-7 | Skin Corr.1B (H314) | ** |
| | | | STOT SE 3 (H335) | |
| SODIUM HYDROXIDE | 1310-73-2 | 215-185-5 | Skin Corr. 1A (H314) | ** |
| Bupivacaine Hydrochloride | 14252-80-3 | Not Listed | Acute Tox. 2 (H300) | = 0.75</td |

| Ingredient | CAS Number | EU EINECS/ELINCS List | GHS Classification | % |
|---------------|------------|-----------------------------|--------------------|---|
| Dextrose | 14431-43-7 | Not Listed | Not Listed | * |
| Methylparaben | 99-76-3 | 202-785-7 | Not Listed | * |

Additional Information: * Proprietary

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.

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Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms and Effects of For information on potential signs and symptoms of exposure, See Section 2 - Hazards

Exposure: Identification and/or Section 11 - Toxicological Information.

Medical Conditions None known

Aggravated by Exposure:

Indication of the Immediate Medical Attention and Special Treatment Needed

Notes to Physician: None

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: Not flammable.

Advice for Fire-Fighters

During all firefighting 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 / Contain the source of spill if it is safe to do so. Collect spill with absorbent material. Clean spill

Collecting: area thoroughly.

Additional Consideration for

Large Spills:

Contain the source of the spill or leak if it is safe to do so. Collect spill with a non-combustible

absorbent material and transfer to labeled container for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid breathing vapor or mist. Avoid contact with eyes, skin and 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.

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

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

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| HYD | ROCHL | ORIC | ACID |
|-----|-------|------|------|
| | | | |

| ,, | ACGIH Ceiling Threshold Limit: Australia PEAK | 2 ppm 5 ppm 7.5 mg/m ³ |
|----|---|---|
| | Austria OEL - MAKs | 5 ppm |
| | Belgium OEL - TWA | 8 mg/m ³ 5 ppm |
| | Bulgaria OEL - TWA | 8 mg/m ³ 5 ppm 8.0 mg/m ³ |
| | Cyprus OEL - TWA | 5 ppm 8 mg/m ³ |
| | Czech Republic OEL - TWA Estonia OEL - TWA | 8 mg/m ³ 5 ppm |
| | Germany - TRGS 900 - TWAs | 8 mg/m ³ 2 ppm |
| | Germany (DFG) - MAK | 3 mg/m ³ 2 ppm 3.0 mg/m ³ |
| | Greece OEL - TWA | 5 ppm |
| | Hungary OEL - TWA | 7 mg/m ³ 8 mg/m ³ |
| | Ireland OEL - TWAs | 5 ppm 8 mg/m ³ |
| | Italy OEL - TWA | 5 ppm 8 mg/m ³ |
| | Japan - OELs - Ceilings | 2 ppm 3.0 mg/m ³ |
| | Latvia OEL - TWA | 5 ppm 8 mg/m ³ |
| | Lithuania OEL - TWA | 5 ppm |
| | Luxembourg OEL - TWA | 8 mg/m ³ 5 ppm |
| | Malta OEL - TWA | 8 mg/m³ 5 ppm |
| | Netherlands OEL - TWA | 8 mg/m ³ 8 mg/m ³ |
| | Poland OEL - TWA Portugal OEL - TWA | 5 mg/m ³ 5 ppm |
| | · · | 8 mg/m ³ |
| | Romania OEL - TWA | 5 ppm 8 mg/m ³ |
| | Slovakia OEL - TWA | 5 ppm 8.0 mg/m ³ |
| | Slovenia OEL - TWA | 5 ppm 8 mg/m ³ |
| | Spain OEL - TWA | 5 ppm 7.6 mg/m ³ |
| | Switzerland OEL -TWAs | 2 ppm 3.0 mg/m ³ |
| | Vietnam OEL - TWAs | 5 mg/m ³ |
| | | |

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

SODIUM HYDROXIDE

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

Bupivacaine Hydrochloride

Pfizer OEL TWA-8 Hr: $20 \mu g/m^3$

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.)

Wear safety glasses or goggles if eye contact is possible. (Eye protection must meet the Eves:

standards in accordance with EN166, ANSI Z87.1 or international equivalent.)

Impervious protective clothing is recommended if skin contact with drug product is possible and Skin:

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.)

Molecular Weight:

Mixture

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9. PHYSICAL AND CHEMICAL PROPERTIES

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

Molecular Formula: Mixture

Solvent Solubility:

Water Solubility:

PH:

Melting/Freezing Point (°C):

Boiling Point (°C):

Partition Coefficient: (Method, pH, Endpoint, Value)

No data available
No data available
No data available.

Water for injection No data available Sodium chloride No data available

Bupivacaine Hydrochloride

No data available

Dextrose

No data available

HYDROCHLORIC ACID

No data available

SODIUM HYDROXIDE

No data available **Methylparaben** No data available

Decomposition Temperature (°C): No data available.

Evaporation Rate (Gram/s):

Vapor Pressure (kPa):

Vapor Density (g/ml):

Relative Density:

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:

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11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

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

ingredients.

Short Term: May cause mild eye irritation. May cause slight skin irritation. (based on components) .

Anesthetic drug: may cause central nervous system and cardiovascular system effects

Known Clinical Effects: Adverse effects associated with therapeutic use include dizziness, nervousness, agitation,

drowsiness, apprehension, euphoria, blurred/double vision, slurred speech, tremors,

convulsions, and seizure. Respiratory depression and arrest may follow. Other, more serious effects seen with IV use of this drug, particularly when it is administered rapidly, are

cardiovascular collapse, central nervous system depression, and/or hypotension.

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

Sodium chloride

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

Bupivacaine Hydrochloride

Rabbit Oral LD50 18 mg/kg
Rat Para-periosteal LD50 6mg/kg
Rat Subcutaneous LD50 43mg/kg
Mouse Intravenous LD50 6.1mg/kg

HYDROCHLORIC ACID

Rat Oral LD 50 238-277 mg/kg

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

Sodium chloride

Eye Irritation Rabbit Moderate Skin Irritation Rabbit Mild

Reproduction & Developmental Toxicity: (Study Type, Species, Route, Dose, End Point, Effect(s))

Bupivacaine Hydrochloride

Prenatal & Postnatal Development Intravenous 0.6 mg/kg LOAEL Neonatal toxicity

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

HYDROCHLORIC ACID

Bacterial Mutagenicity (Ames) Salmonella Negative

In Vivo Micronucleus Rat Negative

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

HYDROCHLORIC ACID

IARC: Group 3 (Not Classifiable)

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12. ECOLOGICAL INFORMATION

Environmental Overview: Environmental properties have not been thoroughly investigated. Releases to the environment

should be avoided.

Toxicity: No data available

Persistence and Degradability: No data available

Bio-accumulative Potential: No data available

Mobility in Soil: No data available

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

HYDROCHLORIC ACID

CERCLA/SARA 313 Emission reporting 1.0 %
CERCLA/SARA Hazardous Substances 5000 lb and their Reportable Quantities: 2270 kg
CERCLA/SARA - Section 302 Extremely Hazardous 500 lb

TPQs

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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):
Present
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

Dextrose

CERCLA/SARA 313 Emission reporting

California Proposition 65

Australia (AICS):

Present

EU EINECS/ELINCS List

Not Listed

Not Listed

SODIUM HYDROXIDE

Not Listed **CERCLA/SARA 313 Emission reporting 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 Australia (AICS): Present Standard for the Uniform Scheduling Schedule 5 for Drugs and Poisons: Schedule 6 **EU EINECS/ELINCS List** 215-185-5

Bupivacaine Hydrochloride

CERCLA/SARA 313 Emission reporting

California Proposition 65

EU EINECS/ELINCS List

Not Listed

Not Listed

Methylparaben

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

Present

202-785-7

16. OTHER INFORMATION

Text of CLP/GHS Classification abbreviations mentioned in Section 3

Acute toxicity, oral-Cat.2; H300 - Fatal if swallowed

Skin corrosion/irritation-Cat.1A; Skin corrosion/irritation-Cat.1B; H314 - Causes severe skin burns and eye damage Specific target organ toxicity, single exposure; Respiratory tract irritation-Cat.3; H335 - May cause respiratory irritation

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

data sheets for individual ingredients.

Reasons for Revision: 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 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
