# This SDS packet was issued with item:

078064162

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078064154



Revision date: 09-Apr-2010

Version: 1.4

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# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Pfizer Inc Pfizer Pharmaceuticals Group 235 East 42nd Street New York, New York 10017 1-212-573-2222

Emergency telephone number: CHEMTREC (24 hours): 1-800-424-9300 Contact E-Mail: pfizer-MSDS@pfizer.com Pfizer Ltd Ramsgate Road Sandwich, Kent CT13 9NJ United Kingdom +00 44 (0)1304 616161

Emergency telephone number: ChemSafe (24 hours): +44 (0)208 762 8322

Material Name: Methylprednisolone Acetate Suspension, USP, Sterile

Trade Name:

Depo-Medrol

Chemical Family:

Mixture

Intended Use:

Pharmaceutical product used as anti-inflammatory

# 2. HAZARDS IDENTIFICATION

Appearance: Signal Word:

White suspension

DANGER

Statement of Hazard:

May damage the unborn child.

Additional Hazard Information:

Short Term:

May be harmful if absorbed through the skin. Not acutely toxic (based on animal data). Accidental ingestion may cause effects similar to those seen in clinical use. May produce

allergic reactions following skin contact.

Long Term:

Animal studies have shown a potential to cause adverse effects on the fetus. Repeat-dose studies in animals have shown a potential to cause adverse effects on blood and blood

forming organs

Known Clinical Effects:

Adverse clinical reactions include the development of hypersensitivity and/or irritation leading to rashes, itching, and burning. Clinical use has resulted in hormonal alterations. Clinical use

has resulted in changes in electrolytes and/or blood chemistry changes.

EU Indication of danger:

Toxic to reproduction: Category 1

#### **EU Hazard Symbols:**



**EU Risk Phrases:** 

Australian Hazard Classification (NOHSC):

R61 - May cause harm to the unborn child. Hazardous Substance. Non-Dangerous Goods.

Material Name: Methylprednisolone Acetate Suspension, USP,

Sterile

Revision date: 09-Apr-2010 Version: 1.4

# 2. HAZARDS IDENTIFICATION

Note:

This document has been prepared in accordance with standards for workplace safety, which require the inclusion of all known hazards of the active substance or its intermediates 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.

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# 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous

Hazaraoao				
Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	%
Benzyl Alcohol	100-51-6	202-859-9	Xn;R20/22	*
Methylprednisolone Acetate	53-36-1	200-171-3	T;48/22-R61	2-8

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	%
Polysorbate 80	9005-65-6	Not listed	Not Listed	*
Sodium phosphate, monobasic	7558-80-7	231-449-2	Not Listed	*
Sodium phosphate, dibasic	7558-79-4	231-448-7	Not Listed	*
Vater	7732-18-5	231-791-2	Not Listed	*
Polyethylene glycol	25322-68-3	Not listed	Not Listed	*

Additional Information:

\* Proprietary

Ingredient(s) indicated as hazardous have been assessed under standards for workplace

safety.

For the full text of the R phrases mentioned in this Section, see Section 16

#### 4. 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.

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

Identification and/or Section 11 - Toxicological Information.

# 5. FIRE FIGHTING MEASURES

Extinguishing Media: Use carbon dioxide, dry chemical, or water spray.

Hazardous Combustion Products: May include oxides of carbon.

Fire Fighting Procedures: During all fire fighting activities, wear appropriate protective equipment, including self-

contained breathing apparatus.

Material Name: Methylprednisolone Acetate Suspension, USP,

Sterile

Revision date: 09-Apr-2010 Version: 1.4

Fire / Explosion Hazards:

Fine particles (such as dust and mists) may fuel fires/explosions.

#### 6. ACCIDENTAL RELEASE MEASURES

Health and Safety Precautions:

Personnel involved in clean-up should wear appropriate personal protective equipment (see

Page 3 of 8

Section 8). Minimize exposure.

Measures for Cleaning / Collecting:

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

area thoroughly.

Measures for Environmental

Protections:

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

avoid environmental release.

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

General 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.

Storage Conditions:

Store as directed by product packaging.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

Benzyl Alcohol

Bulgaria OEL - TWA

Czech Republic OEL - TWA

Listed
Latvia OEL - TWA

Listed
Lithuania OEL - TWA

Listed
Poland OEL - TWA

Listed

**Methylprednisolone Acetate** 

Pfizer OEL TWA-8 Hr: 4µg/m³, Skin

Polyethylene glycol

 Austria OEL - MAKs
 Listed

 Germany - TRGS 900 - TWAs
 1000 mg/m³

 Germany (DFG) - MAK
 1000 mg/m³ MAK

 Slovenia OEL - TWA
 Listed

Analytical Method: Engineering Controls: Analytical method available for methylprednisolone. Contact Pfizer Inc for further information. 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.

Environmental Exposure Controls: Refer to specific M

Refer to specific Member State legislation for requirements under Community environmental

legislation.

Material Name: Methylprednisolone Acetate Suspension, USP,

Sterile

Revision date: 09-Apr-2010 Version: 1.4

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Refer to applicable national standards and regulations in the selection and use of personal Personal Protective Equipment:

protective equipment (PPE).

Hands: Impervious gloves are recommended if skin contact with drug product is possible and for bulk

processing operations.

Wear safety glasses or goggles if eye contact is possible. Eyes:

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

for bulk processing operations.

If the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate Respiratory protection:

respirator with a protection factor sufficient to control exposures to below the OEL.

9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** 

Suspension

Color:

White

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Molecular Formula:

Mixture

Molecular Weight:

Mixture

Polymerization:

Will not occur

10. STABILITY AND REACTIVITY

Chemical Stability:

Conditions to Avoid:

Stable under normal conditions of use.

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

11. TOXICOLOGICAL INFORMATION

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

ingredients. The information included in this section describes the potential hazards of various

forms of the active ingredient.

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

Methylprednisolone Acetate

Rat Oral LD50 >10.000 mg/m<sup>3</sup>

>1,409 mg/kg Mouse Sub-tenon injection (eye) LD50

Rat Subcutaneous LD50 265 mg/kg

Methylprednisolone

Rat Oral LD 50 > 2000 mg/kg

Mouse Oral LD 50 450 mg/kg

1000 mg/kg Rat Intraperitoneal LD 50

Mouse Intraperitoneal LD 50 1409 mg/kg

>3000 mg/kg Rat Subcutaneous LD 50

Polysorbate 80

1790 mg/kg Rat Intravenous LD 50

Mouse Oral LD 50 25 g/kg

Material Name: Methylprednisolone Acetate Suspension, USP,

Sterile

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# 11. TOXICOLOGICAL INFORMATION

Benzyl Alcohol

Rat Oral LD50 1230 mg/kg

Rat Para-periosteal LD50 53 mg/kg

Rat Inhalation LC50 46 mg/m3

Sodium phosphate, dibasic

Rat Oral LD 50 17 g/kg

Sodium phosphate, monobasic

Rat Oral LD 50 8290 mg/kg

**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)

Methylprednisolone Acetate

Eye Irritation Rabbit No effect

Skin Irritation Rabbit No effect

Methylprednisolone

Skin Irritation Rabbit No effect

Eye Irritation Rabbit No effect

Skin Sensitization - GPMT Guinea Pig No effect

Polyethylene glycol

Eye Irritation Rabbit Mild

Skin Irritation Rabbit Mild

Benzyl Alcohol

Eye Irritation Rabbit Severe

Skin Irritation Rabbit Moderate

Skin Irritation Guinea Pig Moderate

Sodium phosphate, dibasic

Eye Irritation Rabbit Mild

Skin Irritation Rabbit Mild

Repeated Dose Toxicity: (Duration, Species, Route, Dose, End Point, Target Organ)

Methylprednisolone

42 Day(s) Dog Oral 167 µg/kg/day LOAEL Adrenal gland

6 Week(s) Rat Subcutaneous 500 µg/kg/day LOAEL None identified

14 Week(s) Rat Subcutaneous 0.4 µg/kg/day NOAEL Blood forming organs, Adrenal gland

52 Week(s) Rat Subcutaneous 4 µg/kg/day NOAEL Blood forming organs Adrenal gland

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

Methylprednisolone

Reproductive & Fertility Rat Subcutaneous 0.004 mg/kg/day NOAEL Paternal toxicity Reproductive & Fertility Rat Subcutaneous 0.02 mg/kg/day LOAEL Fetotoxicity

Embryo / Fetal Development Rat Subcutaneous 1.0 mg/kg/day LOAEL Fetotoxicity, Teratogenic

Material Name: Methylprednisolone Acetate Suspension, USP,

Sterile

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11. TOXICOLOGICAL INFORMATION

Embryo / Fetal Development Embryo / Fetal Development

Mouse Rabbit

Intramuscular Intramuscular

330 mg/kg/day 0.1 mg/kg/day

LOAEL LOAEL

Teratogenic<sup>\*</sup> Teratogenic

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

Methylprednisolone Acetate

Direct DNA Interaction Not applicable Negative In Vitro Cytogenetics Not applicable Negative

Methylprednisolone

Bacterial Mutagenicity (Ames) Unscheduled DNA Synthesis

Salmonella

Negative Rat Hepatocyte Negative

Mammalian Cell Mutagenicity

Chinese Hamster Ovary (CHO) cells

Direct DNA Interaction Negative

Carcinogen Status:

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

Negative

# 12. ECOLOGICAL INFORMATION

**Environmental Overview:** 

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

# 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

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

# 15. REGULATORY INFORMATION

EU Symbol:

EU Indication of danger:

Toxic to reproduction: Category 1

**EU Risk Phrases:** 

R61 - May cause harm to the unborn child.

**EU Safety Phrases:** 

S53 - Avoid exposure - obtain special instructions before use.

S36/37 - Wear suitable protective clothing and gloves.

Material Name: Methylprednisolone Acetate Suspension, USP,

Sterile

Revision date: 09-Apr-2010

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Version: 1.4

# 15. REGULATORY INFORMATION

OSHA Label:

DANGER

May damage the unborn child.

Canada - WHMIS: Classifications

WHMIS hazard class:

Class D, Division 2, Subdivision A



Polysorbate 80

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

Listed Listed

Australia (AICS):

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

Australia (AICS):

Listed Listed

**EU EINECS/ELINCS List** 

202-859-9

Sodium phosphate, monobasic

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

Australia (AICS):

Listed Listed

**EU EINECS/ELINCS List** 

231-449-2

Sodium phosphate, dibasic

**CERCLA/SARA Hazardous Substances** 

2270 kg final RQ 5000 lb final RQ

and their Reportable Quantities:

Inventory - United States TSCA - Sect. 8(b) Australia (AICS):

Listed Listed

231-448-7

**EU EINECS/ELINCS List** 

Water

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

Listed Listed

Australia (AICS):

REACH - Annex IV - Exemptions from the

Present

obligations of Register: **EU EINECS/ELINCS List** 

231-791-2

Methylprednisolone Acetate

Australia (AICS):

Listed

**EU EINECS/ELINCS List** 

200-171-3

Polyethylene glycol

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

Listed

Australia (AICS):

Listed

Material Name: Methylprednisolone Acetate Suspension, USP,

Sterile

Revision date: 09-Apr-2010

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# 16. OTHER INFORMATION

# Text of R phrases mentioned in Section 3

R61 - May cause harm to the unborn child.

R20/22 - Harmful by inhalation and if swallowed.

R48/22 - Harmful: danger of serious damage to health by prolonged exposure if swallowed.

**Data Sources:** 

Pfizer proprietary drug development information. Publicly available toxicity information.

Reasons for Revision:

Not applicable

Prepared by:

Toxicology and Hazard Communication

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** 



Revision date: 23-Mar-2017 Version: 3.0 Page 1 of 11

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

Product Identifier

Material Name: Methylprednisolone Acetate Injectable Suspension, Single-Dose Vial

Trade Name: DEPO-MEDROL; DEPO-NISOLONE; DEPO-MEDRONE; DEPO-MODERIN; DEPO-MEDOL;

DEPO-MEDRATE

Chemical Family: Glucocorticoid

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

Intended Use: Pharmaceutical product used as anti-inflammatory

**Details of the Supplier of the Safety Data Sheet** 

Pfizer Inc Pfizer Ltd
Pfizer Pharmaceuticals Group Ramsgate Road
235 East 42nd Street Sandwich, Kent
New York, New York 10017 CT13 9NJ

1-800-879-3477 United Kingdom +00 44 (0)1304 616161

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** 

Reproductive Toxicity: Category 1A

Specific target organ systemic toxicity (repeated exposure): Category 2

**Label Elements** 

Signal Word: Danger

Hazard Statements: H360D - May damage the unborn child

H373 - May cause damage to organs through prolonged or repeated exposure

**Precautionary Statements:** P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P260 - Do not breathe dust/fume/gas/mist/vapors/spray P281 - Use personal protective equipment as required

P308 + P313 - IF exposed or concerned: Get medical attention/advice

P314 - Get medical attention/advice if you feel unwell

P405 - Store locked up

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

Material Name: Methylprednisolone Acetate Injectable Page 2 of 11

Suspension, Single-Dose Vial

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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	Press. Gas Skin Corr.1A (H314) Acute Tox.3 (H331)	<1.0
Myristyl-gamma-picolinium chloride	2748-88-1	220-387-1	Acute Tox.3 (H301)	<1.0
Sodium chloride	7647-14-5	231-598-3	Not Listed	*
Methylprednisolone Acetate	53-36-1	200-171-3	Repr.1A (H360D) STOT RE.2 (H373)	4-8

Ingredient	CAS Number	EU EINECS/ELINCS List	GHS Classification	%
Water for injection	7732-18-5	231-791-2	Not Listed	*
Polyethylene glycol	25322-68-3	Not Listed	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

PZ01044

**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.

Material Name: Methylprednisolone Acetate Injectable Page 3 of 11

Suspension, Single-Dose Vial

Revision date: 23-Mar-2017 Version: 3.0

**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 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 May include oxides of carbon.

**Products:** 

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

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 / 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 No

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 vapor or mist. Avoid contact with eyes, skin and clothing. When handling, use appropriate personal protective equipment (see Section 8). Wash thoroughly after handling. 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. Releases to the environment should be avoided.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions: Store as directed by product packaging.

Specific end use(s): Pharmaceutical drug product

Material Name: Methylprednisolone Acetate Injectable Page 4 of 11

Suspension, Single-Dose Vial

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# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

# **Control Parameters**

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

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	uiu	CHILL	JI 10	ACI.	

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

Material Name: Methylprednisolone Acetate Injectable Page 5 of 11

Suspension, Single-Dose Vial

Revision date: 23-Mar-2017 Version: 3.0

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Switzerland OEL -TWAs 2 ppm 3.0 mg/m³

Vietnam OEL - TWAs 5 mg/m<sup>3</sup>

Sodium chloride

Latvia OEL - TWA 5 mg/m<sup>3</sup>
Lithuania OEL - TWA 5 mg/m<sup>3</sup>

**Methylprednisolone Acetate** 

Pfizer OEL TWA-8 Hr: 4μg/m³, Skin

Polyethylene glycol

 Austria OEL - MAKs
 1000 mg/m³

 Germany - TRGS 900 - TWAs
 1000 mg/m³

**Germany (DFG) - MAK** 1000 mg/m³ average molecular weight 200-600

Slovakia OEL - TWA 1000 mg/m³
Slovenia OEL - TWA 1000 mg/m³
Switzerland OEL - TWAs 1000 mg/m³

Sodium chloride

Pfizer Occupational Exposure OEB 1 (control exposure to the range of 1000ug/m³ to 3000ug/m³)

Band (OEB):

**Exposure Controls** 

Skin:

Engineering Controls: Engineering controls should be used as the primary means to control exposures. Use process

containment, local exhaust ventilation, or other engineering controls to maintain airborne levels

below recommended exposure limits.

Personal Protective Equipment:

al Protective Refer to applicable national standards and regulations in the selection and use of personal

protective equipment (PPE).

Hands: Impervious disposable gloves (e.g. Nitrile, etc.) (double 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.)

Wear impervious protective clothing to prevent skin contact – consider use of disposable

clothing where appropriate. (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 full mask, P3 filter). (Respirators must meet the standards in accordance with EN136, EN143, ASTM F2704-10 or international equivalent.)

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Suspension Color: White

Odor: 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:** 3.5 to 7.0

Melting/Freezing Point (°C): No data available

Material Name: Methylprednisolone Acetate Injectable Page 6 of 11

Suspension, Single-Dose Vial

Revision date: 23-Mar-2017 Version: 3.0

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (°C): No data available.
Partition Coefficient: (Method, pH, Endpoint, Value)

Methylprednisolone

Predicted 7.4 Log D 1.99

Polyethylene glycol No data available

**Methylprednisolone Acetate** 

No data available
Water for injection
No data available
Sodium chloride
No data available

**Myristyl-gamma-picolinium chloride** Predicted 7.4 Log D 1.30

Hydrochloric Acid No data available Sodium hydroxide 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.):

Polymerization:

No data available
No data available
No data available
Will not occur

# 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. The information included in this section describes the potential hazards of various

forms of the active ingredient.

**Short Term:** May be harmful if absorbed through the skin.

Material Name: Methylprednisolone Acetate Injectable Page 7 of 11

Suspension, Single-Dose Vial

Revision date: 23-Mar-2017 Version: 3.0

# 11. TOXICOLOGICAL INFORMATION

Long Term: Repeat-dose studies in animals have shown a potential to cause adverse effects on

developing fetus and blood and blood forming organs

Known Clinical Effects: Adverse clinical reactions include the development of hypersensitivity and/or irritation leading

to rashes, itching, and burning. Clinical use has resulted in hormonal alterations. Clinical use

has resulted in changes in electrolytes and/or blood chemistry changes.

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

## Methylprednisolone

Rat Oral LD 50 > 2000 mg/kg Mouse Oral LD 50 450mg/kg

Rat Intraperitoneal LD 50 1000mg/kg Mouse Intraperitoneal LD 50 1409mg/kg Rat Subcutaneous LD 50 >3000mg/kg

# **Methylprednisolone Acetate**

Rat Oral LD50 >10,000 mg/kg

Mouse Sub-tenon injection (eye) LD50 >1,409mg/kg

Rat Subcutaneous LD50 265mg/kg

#### Sodium chloride

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

# Myristyl-gamma-picolinium chloride

Rat Oral LD 50 250 mg/kg

Rat Para-periosteal LD50 30mg/kg Rat Intraperitoneal LD50 7500ug/kg Rat Subcutaneous LD50 200mg/kg

# Sodium hydroxide

Mouse IP LD50 40 mg/kg

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)

# Methylprednisolone

Skin Irritation Rabbit No effect Eye Irritation Rabbit No effect

Skin Sensitization - GPMT Guinea Pig No effect

# Polyethylene glycol

PZ01044

Eye Irritation Rabbit Mild Skin Irritation Rabbit Mild

# Methylprednisolone Acetate

Eye Irritation Rabbit No effect Skin Irritation Rabbit No effect

Material Name: Methylprednisolone Acetate Injectable Page 8 of 11

Suspension, Single-Dose Vial

Revision date: 23-Mar-2017 Version: 3.0

# 11. TOXICOLOGICAL INFORMATION

#### Sodium chloride

Eye Irritation Rabbit Moderate Skin Irritation Rabbit Mild

#### **Hydrochloric Acid**

Skin Irritation Severe Eye Irritation Severe

#### Sodium hydroxide

Eye Irritation Rabbit Severe Skin Irritation Rabbit Severe

# Repeated Dose Toxicity: (Duration, Species, Route, Dose, End Point, Target Organ)

#### Methylprednisolone

42 Day(s) Dog Oral 167 µg/kg/day LOAEL Adrenal gland

6 Week(s) Rat Subcutaneous 500 μg/kg/day LOAEL None identified

14 Week(s) Rat Subcutaneous 0.4 μg/kg/day NOAEL Blood forming organs, Adrenal gland 52 Week(s) Rat Subcutaneous 4 μg/kg/day NOAEL Blood forming organs Adrenal gland

#### Myristyl-gamma-picolinium chloride

60 Day(s) Rat Oral 2400 mg/kg Death

# Reproduction & Development Toxicity: (Duration, Species, Route, Dose, End Point, Effect(s))

#### Methylprednisolone

Reproductive & Fertility Rat Subcutaneous 0.004 mg/kg/day NOAEL Paternal toxicity Reproductive & Fertility Rat Subcutaneous 0.02 mg/kg/day LOAEL Fetotoxicity

Embryo / Fetal Development Rat Subcutaneous 1.0 mg/kg/day LOAEL Fetotoxicity, Teratogenic

Embryo / Fetal Development Mouse Intramuscular 330 mg/kg/day LOAEL Teratogenic Embryo / Fetal Development Rabbit Intramuscular 0.1 mg/kg/day LOAEL Teratogenic

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

#### Methylprednisolone

Bacterial Mutagenicity (Ames) Salmonella Negative
Unscheduled DNA Synthesis Rat Hepatocyte Negative

Mammalian Cell Mutagenicity Chinese Hamster Ovary (CHO) cells Negative

Direct DNA Interaction Negative

#### **Methylprednisolone Acetate**

Direct DNA Interaction Not applicable Negative In Vitro Cytogenetics Not applicable 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)

Material Name: Methylprednisolone Acetate Injectable Page 9 of 11

Suspension, Single-Dose Vial

Revision date: 23-Mar-2017 Version: 3.0

# 11. TOXICOLOGICAL INFORMATION

#### 12. ECOLOGICAL INFORMATION

**Environmental Overview:** Environmental properties have not been investigated. Releases to the environment should be

avoided.

Toxicity: No data available

Persistence and Degradability: No data available

Bio-accumulative Potential: No data available Partition Coefficient: (Method, pH, Endpoint, Value)

Methylprednisolone

Predicted 7.4 Log D 1.99

Myristyl-gamma-picolinium chloride

Predicted 7.4 Log D 1.30

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

PZ01044

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

Material Name: Methylprednisolone Acetate Injectable Page 10 of 11

Suspension, Single-Dose Vial

Revision date: 23-Mar-2017 Version: 3.0

# 15. REGULATORY INFORMATION

Matar		inia	-4:	
Water	tor	ınıe	ction	

CERCLA/SARA 313 Emission reporting

California Proposition 65

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

Australia (AICS):

REACH - Annex IV - Exemptions from the

Not Listed

Not Eisted

Not Eis

obligations of Register:

EU EINECS/ELINCS List 231-791-2

**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** 

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

Myristyl-gamma-picolinium 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

Present

220-387-1

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

231-598-3

**Methylprednisolone Acetate** 

CERCLA/SARA 313 Emission reporting

California Proposition 65

Australia (AICS):

Present

EU EINECS/ELINCS List

200-171-3

Polyethylene glycol

CERCLA/SARA 313 Emission reporting

California Proposition 65

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

Australia (AICS):

Standard for the Uniform Scheduling
for Drugs and Poisons:

EU EINECS/ELINCS List

Not Listed

Material Name: Methylprednisolone Acetate Injectable Page 11 of 11

Suspension, Single-Dose Vial

Revision date: 23-Mar-2017 Version: 3.0

# 15. REGULATORY INFORMATION

# 16. OTHER INFORMATION

#### Text of CLP/GHS Classification abbreviations mentioned in Section 3

Reproductive toxicity-Cat.1A; H360D - May damage the unborn child

Specific target organ toxicity, repeated exposure-Cat.2; H373 - May cause damage to organs through prolonged or repeated exposure if swallowed

Acute toxicity, oral-Cat.3; H301 - Toxic if swallowed

Specific target organ toxicity, single exposure; Respiratory tract irritation-Cat.3; H335 - May cause respiratory irritation

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

Acute toxicity, inhalation-Cat.3; H331 - Toxic if inhaled

**Data Sources:** Pfizer proprietary drug development information. Safety data sheets for individual ingredients.

Publicly available toxicity information.

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

Protection.

Revision date: 23-Mar-2017

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** 



Revision date: 12-Feb-2015 Version: 2.2 Page 1 of 10

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

**Product Identifier** 

Material Name: Methylprednisolone Acetate Suspension, USP, Animal Health Product

Trade Name: Depo-medrol (R) Sterile Aqueous Suspension (Animal Health Product)

Chemical Family: Mixture

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

Intended Use: Veterinary product used as anti-inflammatory

Restrictions on Use: Not for human use

Details of the Supplier of the Safety Data Sheet

Zoetis Inc. 100 Campus Drive, P.O. Box 651 Florham Park, New Jersey 07932 (USA)

Rocky Mountain Poison Control Center Phone: 1-866-531-8896

Product Support/Technical Services Phone: 1-800-366-5288

Zoetis Belgium S.A. Mercuriusstraat 20 1930 Zaventem Belgium

Emergency telephone number: Emergency telephone number:

CHEMTREC (24 hours): 1-800-424-9300
Contact E-Mail: VMIPSrecords@zoetis.com

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

# 2. HAZARDS IDENTIFICATION

Appearance: Clear, colorless solution

Classification of the Substance or Mixture

**GHS - Classification** 

Reproductive Toxicity: Category 1A

Specific target organ systemic toxicity (repeated exposure): Category 2

**EU Classification:** 

EU Indication of danger: Toxic to reproduction: Category 1

EU Symbol: T

EU Risk Phrases:

R61 - May cause harm to the unborn child.

**Label Elements** 

Signal Word: Danger

Hazard Statements: H360D - May damage the unborn child

H373 - May cause damage to organs through prolonged or repeated exposure ( blood and

blood forming organs, reproductive system, adrenal gland)

Material Name: Methylprednisolone Acetate Suspension, USP, Page 2 of 10

**Animal Health Product** 

Revision date: 12-Feb-2015 Version: 2.2

**Precautionary Statements:** P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P308 + P313 - IF exposed or concerned: Get medical attention/advice

P405 - Store locked up

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



Other Hazards

Short Term: Not a skin irritant . Not acutely toxic (based on animal data) . May be harmful if absorbed

through the skin. Accidental ingestion may cause effects similar to those seen in clinical use.

May produce allergic reactions following skin contact.

Long Term: Animal studies indicate that this material may cause adverse effects on the developing fetus

blood and blood forming organs.

Known Clinical Effects: Clinical use has resulted in hormonal alterations. Clinical use has resulted in changes in

electrolytes and/or blood chemistry changes. Adverse clinical reactions include the development of hypersensitivity and/or irritation leading to rashes, itching, and burning.

development of hypersensitivity and/or irritation leading to rashes, Hazardous Substance. Non-Dangerous Goods.

Australian Hazard Classification

(NOHSC):

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

пагагиоиъ					
Ingredient	CAS Number	EU	<b>EU Classification</b>	GHS	%
_		EINECS/ELINCS		Classification	
		List			
Methylprednisolone Acetate	53-36-1	200-171-3	T;48/22-R61	Repr.1A (H360D)	2-4
				STOT RE.2 (H373)	
Sodium chloride	7647-14-5	231-598-3	Not Listed	Not Listed	<1
Myristyl-gamma-picolinium chloride	2748-88-1	220-387-1	Xn:R22	Acute Tox.3 (H301)	<0.1

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	GHS Classification	%
Water	7732-18-5	231-791-2	Not Listed	Not Listed	*
Polyethylene glycol	25322-68-3	Not Listed	Not Listed	Not Listed	*

Material Name: Methylprednisolone Acetate Suspension, USP, Page 3 of 10

**Animal Health Product** 

Revision date: 12-Feb-2015 Version: 2.2

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 R phrases and 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 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 May include oxides of carbon.

Products:

Fine particles (such as dust and mists) may fuel fires/explosions.

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

**Collecting:** area thoroughly.

Material Name: Methylprednisolone Acetate Suspension, USP, Page 4 of 10

**Animal Health Product** 

Revision date: 12-Feb-2015 Version: 2.2

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**

When handling, use appropriate personal protective equipment (see Section 8). Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. 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): No data available

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Control Parameters** 

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

**Methylprednisolone Acetate** 

Zoetis OEL TWA 8-hr 4µg/m³, Skin

Sodium chloride

Latvia OEL - TWA 5 mg/m<sup>3</sup>
Lithuania OEL - TWA 5 mg/m<sup>3</sup>

Polyethylene glycol

 Austria OEL - MAKs
 1000 mg/m³

 Germany - TRGS 900 - TWAs
 1000 mg/m³

**Germany (DFG) - MAK** 1000 mg/m³ average molecular weight 200-600

Slovakia OEL - TWA1000 mg/m³Slovenia OEL - TWA1000 mg/m³Switzerland OEL -TWAs1000 ppm

**Exposure Controls** 

**Engineering Controls:** Engineering controls should be used as the primary means to control exposures. Keep

airborne contamination levels below the exposure limits listed above in this section. General

room ventilation is adequate unless the process generates dust, mist or fumes.

Personal Protective Refer to applicable national standards and regulations in the selection and use of personal

**Equipment:** protective equipment (PPE).

Hands: Impervious, disposable gloves (double suggested) are recommended if skin contact with drug

product is possible and for bulk processing operations.

**Eyes:** Wear safety glasses or goggles if eye contact is possible.

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

possible and for bulk processing operations.

Respiratory protection: 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.

Material Name: Methylprednisolone Acetate Suspension, USP, Page 5 of 10

**Animal Health Product** 

Revision date: 12-Feb-2015 Version: 2.2

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solution Color: Colorless

Odor: No data available. Odor Threshold: No data available.

Molecular Formula: Mixture Molecular Weight: Mixture

Solvent Solubility:

Water Solubility:

PH:

No data available

No data available

No data available.

No data available.

No data available.

No data available

No data available.

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

No data available

**Myristyl-gamma-picolinium chloride** Predicted 7.4 Log D 1.30

Methylprednisolone

Predicted 7.4 Log D 1.99

**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.):

Polymerization:

No data available
No data available
Will not occur

# 10. STABILITY AND REACTIVITY

Reactivity: No data available

**Chemical Stability:** Stable under normal conditions of use.

**Possibility of Hazardous Reactions** 

Oxidizing Properties: Nor

**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:** 

Toxicological properties of the formulation have not been investigated. The information included in this section describes the potential hazards of various forms of the active ingredients. The information in this section describes the potential hazards of the individual ingredients and the formulation. Routes of exposure: eye contact, skin contact

Material Name: Methylprednisolone Acetate Suspension, USP, Page 6 of 10

**Animal Health Product** 

Revision date: 12-Feb-2015 Version: 2.2

# 11. TOXICOLOGICAL INFORMATION

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

#### **Methylprednisolone Acetate**

Rat Oral LD50 >10,000 mg/kg

Mouse Sub-tenon injection (eye) LD50 >1,409mg/kg

Rat Subcutaneous LD50 265mg/kg

#### Myristyl-gamma-picolinium chloride

Rat Oral LD 50 250 mg/kg

Rat Para-periosteal LD50 30mg/kg Rat Intraperitoneal LD50 7500ug/kg Rat Subcutaneous LD50 200mg/kg

#### Sodium chloride

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

#### Methylprednisolone

Rat Oral LD 50 > 2000 mg/kg Mouse Oral LD 50 450mg/kg

Rat Intraperitoneal LD 50 1000mg/kg Mouse Intraperitoneal LD 50 1409mg/kg Rat Subcutaneous LD 50 >3000mg/kg

**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)

## Polyethylene glycol

Eye Irritation Rabbit Mild Skin Irritation Rabbit Mild

#### **Methylprednisolone Acetate**

Eye Irritation Rabbit No effect Skin Irritation Rabbit No effect

#### Sodium chloride

Eye Irritation Rabbit Moderate Skin Irritation Rabbit Mild

#### Methylprednisolone

Skin Irritation Rabbit No effect Eye Irritation Rabbit No effect

Skin Sensitization - GPMT Guinea Pig No effect

#### Repeated Dose Toxicity: (Duration, Species, Route, Dose, End Point, Target Organ)

#### Myristyl-gamma-picolinium chloride

60 Day(s) Rat Oral 2400 mg/kg Death

#### Methylprednisolone

Material Name: Methylprednisolone Acetate Suspension, USP, Page 7 of 10

Animal Health Product

Revision date: 12-Feb-2015 Version: 2.2

11. TOXICOLOGICAL INFORMATION

42 Day(s) Dog Oral 167 μg/kg/day LOAEL Adrenal gland

6 Week(s) Rat Subcutaneous 500 μg/kg/day LOAEL None identified

14 Week(s) Rat Subcutaneous 0.4 μg/kg/day NOAEL Blood forming organs, Adrenal gland 52 Week(s) Rat Subcutaneous 4 μg/kg/day NOAEL Blood forming organs Adrenal gland

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

Methylprednisolone

Reproductive & Fertility Rat Subcutaneous 0.004 mg/kg/day NOAEL Paternal toxicity Reproductive & Fertility Rat Subcutaneous 0.02 mg/kg/day LOAEL Fetotoxicity

Embryo / Fetal Development Rat Subcutaneous 1.0 mg/kg/day LOAEL Fetotoxicity, Teratogenic

Embryo / Fetal Development Mouse Intramuscular 330 mg/kg/day LOAEL Teratogenic Embryo / Fetal Development Rabbit Intramuscular 0.1 mg/kg/day LOAEL Teratogenic

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

Methylprednisolone Acetate

Direct DNA Interaction Not applicable Negative In Vitro Cytogenetics Not applicable Negative

Methylprednisolone

Bacterial Mutagenicity (Ames) Salmonella Negative
Unscheduled DNA Synthesis Rat Hepatocyte Negative

Mammalian Cell Mutagenicity Chinese Hamster Ovary (CHO) cells Negative

Direct DNA Interaction Negative

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

12. ECOLOGICAL INFORMATION

**Environmental Overview:** Environmental properties have not been investigated. Releases to the environment should be

avoided.

Toxicity: No data available

Persistence and Degradability: No data available

Bio-accumulative Potential: No data available

Myristyl-gamma-picolinium chloride

Predicted 7.4 Log D 1.30

Methylprednisolone

Predicted 7.4 Log D 1.99

Mobility in Soil: No data available

Material Name: Methylprednisolone Acetate Suspension, USP, Page 8 of 10

**Animal Health Product** 

Revision date: 12-Feb-2015 Version: 2.2

# 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

Canada - WHMIS: Classifications

WHMIS hazard class:

Class D, Division 2, Subdivision A

This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all of the information required by the CPR.



**Methylprednisolone Acetate** 

CERCLA/SARA 313 Emission reporting

California Proposition 65

Australia (AICS):

Present

EU EINECS/ELINCS List

200-171-3

Sodium chloride

ZT00479

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 Eisted

Not

Myristyl-gamma-picolinium chloride

Material Name: Methylprednisolone Acetate Suspension, USP, Page 9 of 10

**Animal Health Product** 

Revision date: 12-Feb-2015 Version: 2.2

# 15. REGULATORY INFORMATION

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

Present

220-387-1

Water

CERCLA/SARA 313 Emission reporting

California Proposition 65

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

Australia (AICS):

REACH - Annex IV - Exemptions from the

Not Listed
Present
Present

obligations of Register:

EU EINECS/ELINCS List 231-791-2

Polyethylene glycol

CERCLA/SARA 313 Emission reporting

California Proposition 65

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

Australia (AICS):

Standard for the Uniform Scheduling

Not Listed

Not Listed

Present

Present

Schedule 3

for Drugs and Poisons:

EU EINECS/ELINCS List Not Listed

# **16. OTHER INFORMATION**

#### Text of R phrases and GHS Classification abbreviations mentioned in Section 3

Acute toxicity, oral-Cat.3; H301 - Toxic if swallowed

Reproductive toxicity-Cat.1A; H360D - May damage the unborn child

Specific target organ toxicity, repeated exposure-Cat.2; H373 - May cause damage to organs through prolonged or repeated exposure

T - Toxic

Xn - Harmful

R22 - Harmful if swallowed.

R61 - May cause harm to the unborn child.

R48/22 - Harmful: danger of serious damage to health by prolonged exposure if swallowed.

**Data Sources:** The data contained in this SDS may have been gathered from confidential internal sources,

raw material suppliers, or from the published literature.

Reasons for Revision: Updated Section 2 - Hazard Identification. Updated Section 11 - Toxicology Information.

Prepared by: Toxicology and Hazard Communication
Zoetis Global Risk Management

Zoetis Global Risk Management

Zoetis 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.

Material Name: Methylprednisolone Acetate Suspension, USP, Page 10 of 10

Animal Health Product

Revision date: 12-Feb-2015 Version: 2.2

**End of Safety Data Sheet** 

ZT<sub>0</sub>0479