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
+44 (0)1304 616161

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

Material Name: Cortisporin Otic Suspension (neomycin and polymyxin b sulfates and hydrocortisone otic suspension, usp) Suspension

Trade Name: CORTISPORIN
Synonyms: Neomycin and polymyxin b sulfates and hydrocortisone otic suspension, usp suspension
Chemical Family: Not applicable
Intended Use: Pharmaceutical product used as antibiotic agent

2. HAZARDS IDENTIFICATION

Appearance: suspension

Statement of Hazard: Non-hazardous in accordance with international standards for workplace safety.

Additional Hazard Information:
- Short Term: May be harmful if swallowed. May cause allergic reaction (based on components)
- Long Term: Repeat-dose studies in animals have shown a potential to cause adverse effects on developing fetus (based on components)

EU Indication of danger: Not classified


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.
MATERIAL SAFETY DATA SHEET

Material Name: Cortisporin Otic Suspension (neomycin and polymyxin b sulfates and hydrocortisone otic suspension, usp) Suspension
Revision date: 28-Feb-2013
Version: 1.1

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>EU EINECS/ELINCS List</th>
<th>EU Classification</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocortisone acetate</td>
<td>50-03-3</td>
<td>200-004-4</td>
<td>Not Listed</td>
<td>1</td>
</tr>
<tr>
<td>Neomycin Sulfate</td>
<td>1405-10-3</td>
<td>215-773-1</td>
<td>Xn;R42/43</td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Repr.Cat.3,R63</td>
<td></td>
</tr>
<tr>
<td>Polymyxin B sulfate</td>
<td>1405-20-5</td>
<td>215-774-7</td>
<td>Xn;R22</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Xn;R42/43</td>
<td></td>
</tr>
<tr>
<td>Sulfuric acid</td>
<td>7664-93-9</td>
<td>231-639-5</td>
<td>C;R35</td>
<td>**</td>
</tr>
<tr>
<td>Propylene glycol</td>
<td>57-55-6</td>
<td>200-338-0</td>
<td>Not Listed</td>
<td>*</td>
</tr>
<tr>
<td>Cetyl alcohol</td>
<td>36653-82-4</td>
<td>253-149-0</td>
<td>Not Listed</td>
<td>*</td>
</tr>
<tr>
<td>Thimerosal</td>
<td>54-64-8</td>
<td>200-210-4</td>
<td>N; R50/53,R33,T+;</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>R26/27/28</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>EU EINECS/ELINCS List</th>
<th>EU Classification</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polysorbate 80</td>
<td>9005-65-6</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>*</td>
</tr>
<tr>
<td>Water for injection</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>Not Listed</td>
<td>*</td>
</tr>
</tbody>
</table>

Additional Information:  
* Proprietary  
** to adjust pH  
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: If irritation occurs or persists, get medical attention. Remove clothing and wash affected skin with soap and water.

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: Formation of toxic gases is possible during heating or fire.
Fire Fighting Procedures: During all fire fighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.

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 Section 8). Minimize exposure.

Measures for Cleaning / Collecting: Absorb spills with non-combustible absorbent material and transfer into a labeled container for disposal.

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: Use adequate ventilation. 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.

Neomycin Sulfate
Pfizer OEL TWA-8 Hr: 100 µg/m³, Sensitizer

Sulfuric acid
ACGIH Threshold Limit Value (TWA) 0.2 mg/m³
Australia STEL 3 mg/m³
Australia TWA 1 mg/m³
Austria OEL - MAKs 0.1 mg/m³
Belgium OEL - TWA 1 mg/m³
Bulgaria OEL - TWA 1.0 mg/m³
Cyprus OEL - TWA 0.05 mg/m³
Czech Republic OEL - TWA 1 mg/m³ 0.05 mg/m³
Denmark OEL - TWA 0.05 mg/m³
Estonia OEL - TWA 0.05 mg/m³
Finland OEL - TWA 0.05 mg/m³
France OEL - TWA 0.05 mg/m³
Germany - TRGS 900 - TWAs 0.1 mg/m³
### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Material Name</th>
<th>Country/Region</th>
<th>Exposure Limit</th>
<th>Reason for Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol</td>
<td>Australia</td>
<td>150 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>474 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ireland</td>
<td>150 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>470 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Latvia</td>
<td>7 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lithuania</td>
<td>7 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Cetyl alcohol</td>
<td>Germany</td>
<td>20 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

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.

**Hydrocortisone acetate**

- Pfizer Occupational Exposure Band (OEB): OEB 2 (control exposure to the range of 100ug/m³ to < 1000ug/m³)

**Polymyxin B sulfate**

- Pfizer Occupational Exposure Band (OEB): OEB 2 - Sensitizer (control exposure to the range of 100ug/m³ to < 1000ug/m³, provide additional precautions to protect from skin contact)

**Engineering Controls:**

General room ventilation is adequate unless the process generates dust, mist or fumes. Local and general ventilation should be used as necessary, when handling this material in bulk.

**Environmental Exposure Controls:**

Refer to specific Member State legislation for requirements under Community environmental legislation.
MATERIAL SAFETY DATA SHEET

Material Name: Cortisporin Otic Suspension (neomycin and polymyxin b sulfates and hydrocortisone otic suspension, usp) Suspension
Revision date: 28-Feb-2013

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal Protective Equipment: Refer to applicable national standards and regulations in the selection and use of personal protective equipment (PPE).

Hands: Impervious gloves 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 protective clothing is recommended if skin contact with drug product is possible and for bulk processing operations.

Respiratory protection: If airborne exposures are within or exceed the Occupational Exposure Band (OEB) range, wear an appropriate respirator with a protection factor sufficient to control exposures to the bottom of the OEB range.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Suspension
Molecular Formula: Mixture
Polymerization: Will not occur

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of use.
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

11. TOXICOLOGICAL INFORMATION

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

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

Polymyxin B sulfate
Mouse Oral LD50 790 mg/kg
Rat SC LD50 50 mg/kg
Rat IV LD50 3.98 mg/kg

Hydrocortisone acetate
Mouse IP LD50 2300 mg/kg
Rat SC LD50 449 mg/kg

Thimerosal
Rat Oral LD50 75 mg/kg
Mouse Oral LD50 91 mg/kg
Rat Subcutaneous LD50 98 mg/kg

Polysorbate 80

PZ02102
11. TOXICOLOGICAL INFORMATION

### Neomycin Sulfate
- **Rat** Oral LD50 2750 mg/kg
- **Mouse** Oral LD50 2880 mg/kg
- **Mouse Intraperitoneal** LD50 116 mg/kg
- **Rat Subcutaneous** LD50 633 mg/kg
- **Mouse Subcutaneous** LD50 275 mg/kg

### Sulfuric acid
- **Rat** Oral LD50 2140 mg/kg

### Cetyl alcohol
- **Rat** Oral LD50 5000 mg/kg
- **Rabbit Dermal** LD50 > 2,600 mg/kg
- **Mouse Oral** LD50 3200 mg/kg

### Propylene glycol
- **Mouse Oral** LD50 22,000 mg/kg
- **Rat Oral** LD50 20,000 mg/kg
- **Rabbit Dermal** LD50 20,800 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)

#### Thimerosal
- **Eye Irritation** Rabbit Mild

#### Neomycin Sulfate
- **Skin Irritation** Rabbit Moderate
- **Eye Irritation** Rabbit Minimal

#### Sulfuric acid
- **Eye Irritation** Rabbit Severe

#### Propylene glycol
- **Skin Irritation** Rabbit Mild

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

#### Polymyxin B sulfate
- **9 Day(s)** Mouse Subcutaneous 284 mg/kg LOAEL Skin

#### Neomycin Sulfate
- **6 Week(s)** Dog Oral 100 mg/kg/day NOAEL No effects at maximum dose
- **3 Month(s)** Guinea Pig Oral 10 mg/kg/day NOAEL No effects at maximum dose
- **3 Month(s)** Dog Subcutaneous 20 mg/kg/day LOAEL Kidney
- **12 Month(s)** Cat Oral 12 mg/kg/day NOAEL Blood forming organs
- **3 Month(s)** Guinea Pig Subcutaneous 10 mg/kg/day LOAEL Kidney
11. TOXICOLOGICAL INFORMATION

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

Neomycin Sulfate
Reproductive & Fertility Mouse Oral 4000 mg/L NOAEL No effects at maximum dose
2 Generation Reproductive Toxicity Rat Oral 25 mg/kg/day NOAEL Fetotoxicity
Reproductive & Fertility Rat Oral 25 mg/kg/day NOAEL No effects at maximum dose
Prenatal & Postnatal Development Rat Subcutaneous 6 mg/kg/day LOAEL Developmental toxicity

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

Neomycin Sulfate
Bacterial Mutagenicity (Ames) Salmonella, E. coli Negative
Mammalian Cell Mutagenicity Chinese Hamster Ovary (CHO) cells Negative
In Vivo Cytogenetics Mouse Negative
In Vitro Chromosome Aberration Human Lymphocytes Positive

Carcinogenicity: (Duration, Species, Route, Dose, End Point, Effect(s))

Neomycin Sulfate
2 Year(s) Rat Oral 25 mg/kg/day NOAEL Not carcinogenic

Carcinogen Status: None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.

Sulfuric acid
IARC: Group 1 (Carcinogenic to Humans)
OSHA: Listed

12. ECOLOGICAL INFORMATION

Environmental Overview: The environmental characteristics of this material have not been fully evaluated. Releases to the environment should be avoided.

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

Neomycin Sulfate
Daphnia magna (Water Flea) OECD EC50 48 Hours 68 mg/L
Salmo gairdneri (Trout) OECD NOEC 96 Hours >1000 mg/L

Bacterial Inhibition: (Inoculum, Method, End Point, Result)

Neomycin Sulfate
Activated sludge OECD EC50 3 Hours 399 mg/L
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. This product contains trace quantities of mercury and may qualify as a RCRA Hazardous Waste. Status should be confirmed using the EPA Toxicity Characteristic Leaching Procedure (TCLP).

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

<table>
<thead>
<tr>
<th>EU Symbol:</th>
<th>Not classified</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU Indication of danger:</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

OSHA Label:
Non-hazardous in accordance with international standards for workplace safety.

Canada - WHMIS: Classifications

WHMIS hazard class:
None required
This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Hydrocortisone acetate

<table>
<thead>
<tr>
<th>Australia (AICS):</th>
<th>Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard for the Uniform Scheduling for Drugs and Poisons:</td>
<td>Schedule 2</td>
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<tr>
<td>EU EINECS/ELINCS List</td>
<td>200-004-4</td>
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</table>

Neomycin Sulfate

<table>
<thead>
<tr>
<th>California Proposition 65</th>
<th>developmental toxicity initial date 10/1/92</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory - United States TSCA - Sect. 8(b)</td>
<td>Present</td>
</tr>
</tbody>
</table>
15. REGULATORY INFORMATION

Australia (AICS): Present
EU EINECS/ELINCS List 215-773-1

Polymyxin B sulfate
  Australia (AICS): Present
  EU EINECS/ELINCS List 215-774-7

Polysorbate 80
  Inventory - United States TSCA - Sect. 8(b) Present
  Australia (AICS): Present

Sulfuric acid
  CERCLA/SARA 313 Emission reporting 1.0 %
  CERCLA/SARA Hazardous Substances and their Reportable Quantities:
    1000 lb
    454 kg
  CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs:
    1000 lb
  Inventory - United States TSCA - Sect. 8(b) Present
  Australia (AICS): Present
  Standard for the Uniform Scheduling for Drugs and Poisons:
    Schedule 6
  EU EINECS/ELINCS List 231-639-5

Propylene glycol
  Inventory - United States TSCA - Sect. 8(b) Present
  Australia (AICS): Present
  EU EINECS/ELINCS List 200-338-0

Cetyl alcohol
  Inventory - United States TSCA - Sect. 8(b) Present
  Australia (AICS): Present
  EU EINECS/ELINCS List 253-149-0

Thimerosal
  Inventory - United States TSCA - Sect. 8(b) Present
  Australia (AICS): Present
  EU EINECS/ELINCS List 200-210-4

Water for injection
  Inventory - United States TSCA - Sect. 8(b) Present
  Australia (AICS): Present
  REACH - Annex IV - Exemptions from the obligations of Register:
    EU EINECS/ELINCS List 231-791-2

Additional Information: White petrolatum is not classified as a carcinogen. Nota N applies since the full refining history is known and it can be shown that the substances from which the petroleum jelly was produced are not a carcinogen.
16. OTHER INFORMATION

Text of R phrases mentioned in Section 3

R22 - Harmful if swallowed.
R63 - Possible risk of harm to the unborn child.
R35 - Causes severe burns.
R33 - Danger of cumulative effects.
R42/43 - May cause sensitization by inhalation and skin contact.
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R26/27/28 - Very toxic by inhalation, in contact with skin and if swallowed.

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

Reasons for Revision: Updated Section 11 - Toxicology Information.

Prepared by: Product Stewardship 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