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

Pfizer Inc
Pfizer Pharmaceuticals Group
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New York, New York 10017
1-212-573-2222

Pfizer Ltd
Ramsgate Road
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+00 44 (0)1304 616161

Emergency telephone number:
CHEMTREC (24 hours): 1-800-424-9300
Contact E-Mail: pfizer-MSDS@pfizer.com

Material Name: Viroptic Ophthalmic Solution Sterile 1%

| Trade Name:       | VIROPTIC                                  |
| Synonyms:         | Trifluridine Ophthalmic Solution          |
| Chemical Family:  | Not determined                             |
| Intended Use:     | Pharmaceutical product                     |

2. HAZARDS IDENTIFICATION

Appearance: Sterile solution
Signal Word: WARNING

Statement of Hazard: Suspected of causing cancer.
                  Suspected of causing genetic defects.

Additional Hazard Information:

Short Term: Mild eye irritation.
Known Clinical Effects:
Adverse effects most commonly reported in clinical use include burning/stinging of the eyes, irritation, swelling of the eye hypersensitivity reactions, increased intra-ocular pressure (glaucoma).

EU Classification

EU Indication of danger: Mutagenic: Category 3
                        Carcinogenic: Category 3

EU Hazard Symbols: Xn

EU Risk Phrases:
R40 - Limited evidence of a carcinogenic effect.
R68 - Possible risk of irreversible effects.

Australian Hazard Classification (NOHSC):
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.

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>Thimerosal</td>
<td>54-64-8</td>
<td>200-210-4</td>
<td>N; R50/53 R33 T+; R26/27/28</td>
<td>0.001</td>
</tr>
<tr>
<td>Acetic acid</td>
<td>64-19-7</td>
<td>200-580-7</td>
<td>C;R35 R10</td>
<td>&lt;1.0</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>7647-14-5</td>
<td>231-598-3</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Trifluridine</td>
<td>70-00-8</td>
<td>Not Listed</td>
<td>Mut. Cat.3,R68; Carc. Cat.3,R40</td>
<td>1</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>Sodium acetate</td>
<td>127-09-3</td>
<td>204-823-8</td>
<td>Not Listed</td>
<td></td>
</tr>
</tbody>
</table>

Additional Information: 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: 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: 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: Minimize generating airborne mists and vapors. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. 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.

Acetic acid
ACGIH Threshold Limit Value (TWA) 10 ppm
ACGIH Threshold Limit Value (STEL) 15 ppm
Australia STEL 15 ppm 37 mg/m³
Australia TWA 10 ppm 25 mg/m³
Austria OEL - MAKs 10 ppm 25 mg/m³
Belgium OEL - TWA 10 ppm 25 mg/m³
Bulgaria OEL - TWA 25.0 mg/m³
Cyprus OEL - TWA 10 ppm 25 mg/m³
Czech Republic OEL - TWA 25 mg/m³
Denmark OEL - TWA 10 ppm 25 mg/m³
Estonia OEL - TWA 10 ppm 25 mg/m³
Finland OEL - TWA 5 ppm 13 mg/m³
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Country / Standard</th>
<th>TWA</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany - TRGS 900</td>
<td>10 ppm</td>
<td>25 mg/m³</td>
</tr>
<tr>
<td>Germany (DFG) - MAK</td>
<td>10 ppm</td>
<td>25 mg/m³</td>
</tr>
<tr>
<td>Greece OEL - TWA</td>
<td>10 ppm</td>
<td>25 mg/m³</td>
</tr>
<tr>
<td>Hungary OEL - TWA</td>
<td>10 ppm</td>
<td>25 mg/m³</td>
</tr>
<tr>
<td>Ireland OEL - TWAs</td>
<td>10 ppm</td>
<td>25 mg/m³</td>
</tr>
<tr>
<td>Latvia OEL - TWA</td>
<td>10 ppm</td>
<td>25 mg/m³</td>
</tr>
<tr>
<td>Lithuania OEL - TWA</td>
<td>10 ppm</td>
<td>25 mg/m³</td>
</tr>
<tr>
<td>Luxembourg OEL - TWA</td>
<td>10 ppm</td>
<td>25 mg/m³</td>
</tr>
<tr>
<td>Malta OEL - TWA</td>
<td>10 ppm</td>
<td>25 mg/m³</td>
</tr>
<tr>
<td>OSHA - Final PELS - TWAs:</td>
<td>10 ppm</td>
<td>25 mg/m³</td>
</tr>
<tr>
<td>Poland OEL - TWA</td>
<td>15 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Portugal OEL - TWA</td>
<td>10 ppm</td>
<td></td>
</tr>
<tr>
<td>Romania OEL - TWA</td>
<td>10 ppm</td>
<td>25 mg/m³</td>
</tr>
<tr>
<td>Slovakia OEL - TWA</td>
<td>10 ppm</td>
<td>25 mg/m³</td>
</tr>
<tr>
<td>Slovenia OEL - TWA</td>
<td>10 ppm</td>
<td>25 mg/m³</td>
</tr>
<tr>
<td>Spain OEL - TWA</td>
<td>10 ppm</td>
<td>25 mg/m³</td>
</tr>
<tr>
<td>Sweden OEL - TWAs</td>
<td>5 ppm</td>
<td>13 mg/m³</td>
</tr>
</tbody>
</table>

Sodium chloride
- Latvia OEL - TWA: 5 mg/m³
- Lithuania OEL - TWA: 5 mg/m³

Trifluridine
- Pfizer Occupational Exposure Band (OEB): OEB 4 (control exposure to the range of >1 µg/m³ to <10 µg/m³)

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.

Environmental Exposure Controls:
Refer to specific Member State legislation for requirements under Community environmental legislation.

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.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Sterile solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Formula:</td>
<td>Mixture</td>
</tr>
<tr>
<td>pH:</td>
<td>5.5-6.0</td>
</tr>
</tbody>
</table>

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.

Product Level Toxicity Data

<table>
<thead>
<tr>
<th>Study Type</th>
<th>Species</th>
<th>Route</th>
<th>Dosage (mg/kg/day)</th>
<th>End Point</th>
<th>Effect(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Embryo/Fetal Development</td>
<td>Rabbit</td>
<td>Topical, eye</td>
<td>1%</td>
<td>NOAEL</td>
<td>Not teratogenic</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Species</th>
<th>Route</th>
<th>LD50 (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trifluridine</td>
<td>Rat</td>
<td>Intravenous</td>
<td>2946</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>Oral</td>
<td>&gt; 4379</td>
</tr>
<tr>
<td></td>
<td>Mouse</td>
<td>Oral</td>
<td>&gt; 4379</td>
</tr>
<tr>
<td>Thimerosal</td>
<td>Rat</td>
<td>Oral</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Mouse</td>
<td>Oral</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>Subcutaneous</td>
<td>98</td>
</tr>
<tr>
<td>Acetic acid</td>
<td>Rat</td>
<td>Oral</td>
<td>3530</td>
</tr>
<tr>
<td></td>
<td>Mouse</td>
<td>Inhalation</td>
<td>5000       ppm</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>Rat</td>
<td>Oral</td>
<td>3000</td>
</tr>
<tr>
<td></td>
<td>Mouse</td>
<td>Oral</td>
<td>4000</td>
</tr>
</tbody>
</table>

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.
11. TOXICOLOGICAL INFORMATION

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

Thimerosal
Eye Irritation Rabbit Mild

Sodium chloride
Eye Irritation Rabbit Moderate
Skin Irritation Rabbit Mild

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

Trifluridine
Embryo / Fetal Development Rat Subcutaneous 1 mg/kg/day NOAEL Fetotoxicity, Not teratogenic
Embryo / Fetal Development Rabbit Subcutaneous 1 mg/kg/day NOAEL Fetotoxicity, Not Teratogenic, Fetal mortality

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

Trifluridine
In Vitro Sister Chromatid Exchange Hamster Lymphocytes Positive
Cell Transformation Assay Mouse Negative
Forward Mutation Assay Hamster Lung Cells Negative
Chromosome Aberration Rat Positive

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

Trifluridine
2 Year(s) Rat Subcutaneous 1.5 mg/kg/day LOAEL Tumors, Mammary gland, Gastrointestinal system, Liver, Spleen
2 Year(s) Mouse Subcutaneous 1 mg/kg/day LOAEL Tumors, Gastrointestinal system, Female reproductive system, Male reproductive system

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 of the formulation have not been investigated. Releases to the environment should be avoided.

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

Acetic acid
Pimephales promelas (Fathead Minnow) LC-50 1 Hours > 315 mg/L
Pimephales promelas (Fathead Minnow) LC-50 24 Hours 122 mg/L
Mysidopsis bahia (Mysid Shrimp) LC-50 48 Hours 100-300 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.

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

EU Indication of danger:
Mutagenic: Category 3
Carcinogenic: Category 3

EU Risk Phrases:
R40 - Limited evidence of a carcinogenic effect.
R68 - Possible risk of irreversible effects.

OSHA Label:
WARNING
Suspected of causing cancer.
Suspected of causing genetic defects.

Canada - WHMIS: Classifications
WHMIS hazard class:
None required

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

Acetic acid
CERCLA/SARA Hazardous Substances and their Reportable Quantities: 5000 lb
Inventory - United States TSCA - Sect. 8(b) Present

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

00232528
15. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>Substance</th>
<th>Australia (AICS):</th>
<th>Inventory - United States TSCA - Sect. 8(b)</th>
<th>EU EINECS/ELINCS List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium chloride</td>
<td>Present</td>
<td>Present</td>
<td>200-580-7</td>
</tr>
<tr>
<td>Sodium acetate</td>
<td>Present</td>
<td>Present</td>
<td>231-598-3</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

Text of R phrases mentioned in Section 3

R10 - Flammable.
R33 - Danger of cumulative effects.
R35 - Causes severe burns.
R40 - Limited evidence of a carcinogenic effect
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.
R68 - Possible risks of irreversible effects.

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

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