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

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Emergency telephone number: Emergency telephone number:

Material Name: Metronidazole Extended Release Tablets

Trade Name: Flagyl(R) ER
Chemical Family: Mixture

Intended Use: Pharmaceutical product used as antibiotic agent antiprotozoal agent

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous

| Ingredient | CAS Number | EU EINECS List | % |
|------------------------|------------|-----------------------|------|
| Metronidazole | 443-48-1 | 207-136-1 | 71.5 |
| Titanium dioxide | 13463-67-7 | 236-675-5 | * |
| Magnesium Stearate | 557-04-0 | 209-150-3 | * |
| Silicon dioxide, NF | 7631-86-9 | 231-545-4 | * |
| Talc (non-asbestiform) | 14807-96-6 | 238-877-9 | * |

| Ingredient | CAS Number | EU EINECS List | % |
|----------------------------------|------------|-----------------------|---|
| Polyethylene glycol | 25322-68-3 | Not listed | * |
| Hydroxypropyl cellulose | 9004-64-2 | Not listed | * |
| FD & C Blue No. 2, Aluminum lake | 16521-38-3 | 240-589-3 | * |
| Lactose | 63-42-3 | 200-559-2 | * |
| Polysorbate 80 | 9005-65-6 | Not listed | * |
| Simethicone emulsion | 67762-90-7 | Not listed | * |
| Methacrylic acid copolymer | 25086-15-1 | Not listed | * |

Additional Information: * Proprietary

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

safety.

3. HAZARDS IDENTIFICATION

Appearance: Blue Tablets Signal Word: WARNING

Statement of Hazard: Suspected of damaging the unborn child.

Suspected of causing cancer.

Additional Hazard Information:

Short Term: The active ingredient is not acutely toxic. Not an eye irritant (based on components).

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

Known Clinical Effects: Clinical use of this drug has caused nausea, dizziness and effects on blood forming organs.

EU Indication of danger: Harmful

EU Hazard Symbols:



Note:

EU Risk Phrases:

R40 - Limited evidence of a carcinogenic effect R63 - Possible risk of harm to the unborn child. Hazardous Substance. Non-Dangerous Goods.

Australian Hazard Classification

(NOHSC):

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.

4. FIRST AID MEASURES

Eye Contact: Flush eye(s) immediately with plenty of water. If irritation occurs or persists, get medical

attention.

Skin Contact: Wash skin with soap and water. If irritation occurs or persists, get 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.

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: Not applicable

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 spilled material by a method that

controls dust generation. A damp cloth or a filtered vacuum should be used to clean spills of

dry solids. 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.

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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 dust generation and accumulation. If tablets or capsules are crushed and/or broken,

avoid breathing dust and avoid contact with eyes, skin, and clothing. When handling, use appropriate personal protective equipment (see Section 8). Wash thoroughly after handling.

Storage Conditions: Store as directed by product packaging.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Titanium dioxide

OSHA - Final PELS - TWAs: = 15 mg/m³ TWA total

ACGIH Threshold Limit Value (TWA) = 10 mg/m³ TWA

Australia TWA = 10 mg/m³ TWA

Magnesium Stearate

ACGIH Threshold Limit Value (TWA) = 10 mg/m³ TWA except stearates of toxic metals

Australia TWA = 10 mg/m³ TWA

Silicon dioxide, NF

OSHA - Final PELs - Table Z-3 Mineral D: (80)/(% SiO2) mg/m³ TWA

= 20 mppcf TWA = 2 mg/m³ TWA

Talc (non-asbestiform)

Australia TWA

OSHA - Final PELs - Table Z-3 Mineral D: = 20 mppcf TWA
ACGIH Threshold Limit Value (TWA) = 2 mg/m³ TWA

Australia TWA = 2.5 mg/m³ TWA containing no asbestos fibers

The exposure limit(s) listed for solid components are only relevant if dust may be generated.

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.

Metronidazole

Pfizer Occupational Exposure OEB2 (control exposure to the range of >100ug/m³ to < 1000ug/m³)

Band (OEB):

Engineering Controls: 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. Keep air contamination levels below the exposure limits or within the OEB range listed above in this

section.

Personal Protective Equipment:

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: Whenever excessive air contamination (dust, mist, vapor) is generated, respiratory protection,

with appropriate protection factors, should be used to minimize exposure.

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9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical State: Tablets Color: Blue Molecular Formula: Mixture **Molecular Weight:** Mixture

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of use.

Conditions to Avoid: Not determined

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.

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

Lactose

Oral LD50 Rat > 10 g/kg

Polysorbate 80

Rat Intravenous LD 50 1790 mg/kg

Mouse Oral LD 50 25 g/kg

Silicon dioxide, NF

Rat Oral LD50 10 g/kg

Talc (non-asbestiform)

Rat Oral LD50 > 1600 mg/kg

Titanium dioxide

Oral LD50 > 7500 mg/kg Rat Subcutaneous Rat LD 50 50 mg/kg

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Oral LD 50 3 g/kg Rat

Oral LD 50 3800 mg/kg Mouse

870 mg/kg Mouse Intraperitoneal LD 50

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.

<u>Irritation / Sensitization: (Study Type, Species, Severity)</u>

Polyethylene glycol

Eve Irritation Rabbit Mild Skin Irritation Rabbit Mild

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Eye Irritation Rabbit No effect

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

Magnesium Stearate

13 Week(s) Rat Oral 1092 g/kg LOAEL Liver

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Oral 2 Year(s) Mouse 600 mg/kg LOAEL 80 Week(s) Rat Oral 30 mg/kg LOAEL

LOAEL Kidney, Ureter, Bladder 34 Day(s) Rat Oral = 34 g/kg

4 Month(s) Dog Oral 75 mg/kg LOAEL

1 Year(s) Non-human Primate Oral 150 mg/kg LOAEL

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

Metronidazole

400 mg/kg Reproductive & Fertility Rat Oral LOAEL Fertility

Reproductive & Fertility Rabbit Oral 200 mg/kg NOAEL Fertility, Developmental toxicity, Fetotoxicity

Embryo / Fetal Development Fetotoxicity Mouse Intraperitoneal 9 mg/kg LOAEL

Embryo / Fetal Development Rat Oral 200 mg/kg NOEL Not Teratogenic

Embryo / Fetal Development Mouse Intraperitoneal 40 mg/kg LOAEL Fetotoxicity

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

Metronidazole

Bacterial Mutagenicity (Ames) Positive Sister Chromatid Exchange Negative Unscheduled DNA Synthesis Negative

In Vivo Micronucleus Negative

Chromosome Aberration **Human Lymphocytes** Negative

Carcinogen Status: See below

Silicon dioxide, NF

IARC: Group 3

Talc (non-asbestiform)

IARC: Group 3

Titanium dioxide

IARC: Group 2B OSHA: Present

Metronidazole

IARC: Group 2B

NTP: Reasonably Anticipated To Be A Carcinogen

OSHA: Present

12. ECOLOGICAL INFORMATION

Environmental Overview: This formulation has not been tested as a whole, the following apply to component

substance(s): No harmful effects to aquatic organisms are expected. This material has

potential to bioaccumulate and long term adverse effects to aquatic organisms are possible.

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

Metronidazole

Mysid Shrimp OECD LC-50 96 Hours >180 mg/L

Sheepshead Minnow OECD LC-50 96 Hours >1060 mg/L

Aquatic Toxicity Comments: A greater than (>) symbol indicates that acute ecotoxicity was not observed at the maximum

solubility. Since the substance is insoluble in aqueous solutions above this concentration, an

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acute ecotoxicity value (i.e. LC/EC50) is not achievable.

13. DISPOSAL CONSIDERATIONS

Disposal Procedures: Dispose of waste in accordance with all applicable laws and regulations.

14. TRANSPORT INFORMATION

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

15. REGULATORY INFORMATION

EU Symbol: Xn
EU Indication of danger: Harmful

EU Risk Phrases:

R40 - Limited evidence of a carcinogenic effect R63 - Possible risk of harm to the unborn child.

EU Safety Phrases:

S22 - Do not breathe dust.

S36/37 - Wear suitable protective clothing and gloves. S53 - Avoid exposure - obtain special instructions before use.

OSHA Label:

WARNING

Suspected of damaging the unborn child.

Suspected of causing cancer.

Canada - WHMIS: Classifications

WHMIS hazard class:

Class D, Division 2, Subdivision A



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California Proposition 65Listed; CancerAustralia (AICS):PresentStandard for the Uniform SchedulingSchedule 4

for Drugs and Poisons:

EU EINECS List 207-136-1

Polyethylene glycol

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

Hydroxypropyl cellulose

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

FD & C Blue No. 2, Aluminum lake

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

Australia (AICS):

EU EINECS List

Present
240-589-3

Titanium dioxide

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

Australia (AICS):

EU EINECS List

Present
236-675-5

Lactose

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

Australia (AICS):

EU EINECS List

Present
200-559-2

Magnesium Stearate

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

Australia (AICS):

EU EINECS List

Present
209-150-3

Polysorbate 80

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

Silicon dioxide, NF

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

Australia (AICS):

EU EINECS List

Present
231-545-4

Simethicone emulsion

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

Australia (AICS):

Present

Talc (non-asbestiform)

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

Australia (AICS):

EU EINECS List

Present
238-877-9

Methacrylic acid copolymer

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

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|--|---------|-----------------------------|
| Australia (AICS): | Present | |

16. OTHER INFORMATION

Prepared by:Toxicology and Hazard Communication
Pfizer Global Environment, Health, and Safety

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End of Safety Data Sheet