## 1. PRODUCT AND COMPANY IDENTIFICATION

## Product Name <br> Common Name <br> Chemical Name <br> Synonyms <br> Product Use <br> Classification

Supplier

Isordil
Not available
Not applicable
Isordil Tablets, Isordil Titradose, Isordil Tembids, Isosorbide dinitrate
Pharmaceutical product
Vasodilating Agent
Wyeth
P.O. Box 8299

Philadelphia, PA 19101 USA.
Telephone: 1-610-688-4400

Chemtrec USA, Puerto Rico, Canada 1-800-424-9300
Chemtrec International 1-703-527-3887

## 2. HAZARDS IDENTIFICATION

## Emergency Overview

This contains an active pharmaceutical ingredient that can affect body functions; handle with caution.

Appearance Pharmaceutical tablet or capsule

Physical State Solid
Odor Not available

## Potential Physical Hazards

## Potential Health Effects

Eyes
Skin
Inhalation
Ingestion

## -

## Potential Environmental Effects

Powders and solids are presumed to be combustible.

## Not available

See Ingestion
See Ingestion and/or Other
The most common effects may include dilation of blood vessels, lowered blood pressure, headache, lightheadedness and dizziness.

Please see Patient Package Insert for further information.
Therapeutic Target Organ(s) Cardiovascular system
Not listed by OSHA, NTP or IARC.
There is no known ecological information for this product.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Common Name | CAS-No | Composition |
| :---: | :---: | :---: |
| Isosorbide dinitrate | $87-33-2$ | $2.5-40 \mathrm{mg} / \mathrm{tablet}$ or capsule |
| Inactive Ingredients | Not applicable | Remainder |
|     |  |  | 4. FIRST AID MEASURES


| Eye Contact | In the case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek <br> medical advice. |
| :--- | :--- |
| Skin Contact | Take off contaminated clothing and shoes immediately. Wash off immediately with soap and <br> plenty of water. If skin irritation persists, call a physician. |
| Inhalation | Move to fresh air. Artificial respiration and/or oxygen may be necessary. If symptoms persist, <br> call a physician. |
| Ingestion | If symptoms persist, call a physician. Do not induce vomiting without medical advice. Never <br> give anything by mouth to an unconscious person. |

## 5. FIRE-FIGHTING MEASURES

## Flammable Properties

Presumed to be a combustible particulate solid.

## Extinguishing Media <br> Suitable Extinguishing Media <br> Unsuitable Extinguishing Media

Use water spray, foam, dry chemical or carbon dioxide.
Do NOT use water jet.

Fire Fighting Evacuate area and fight fire from a safe distance. Cool closed containers exposed to fire with water spray. In the event of fire and/or explosion do not breathe fumes.

## Hazardous Combustion Products

Carbon oxides, nitrogen oxides.
Protective Equipment and Precautions for Firefighters

In the event of fire, wear self-contained breathing apparatus and special protective equipment for fire fighters.

## 6. ACCIDENTAL RELEASE MEASURES

## Personal Precautions

## Environmental Precautions

## Methods for Containment

Methods for Cleaning up
Refer to protective measures listed in Sections 7 and 8.
Prevent product from entering drains. Local authorities should be advised if a significant spill cannot be contained.

Not available
Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly. Avoid formation of dust and aerosols.

## 7. HANDLING AND STORAGE

| Handling | For personal protection see Section 8. Handle in accordance with good industrial hygiene and safety practice. Skin should be washed after contact. Avoid formation of dust and aerosols. |
| :---: | :---: |
| Storage | No special safety precautions required. Keep container tightly closed. |
| 8. EXPOSURE CONTROLS / PERSONAL PROTECTION |  |
| Common Name Isosorbide dinitrate | Exposure Guideline $20 \mathrm{mcg} / \mathrm{m}^{3}$ (skin absorbed) |
| Engineering Controls | Apply technical measures to comply with the occupational exposure guideline. Local exhaust ventilation is needed for limited open handling or where aerosols may be generated. |
| Personal Protective Equipment |  |
| Eye/face Protection | Provide eye protection based on risk assessment. |
| Skin Protection | Wear nitrile or latex gloves. Wear protective garment. |
| Respiratory Protection | Base respirator selection on a risk assessment. |
| General Hygiene Considerations | When using, do not eat, drink or smoke. General industrial hygiene practice. Wash hands before breaks and at the end of workday. |
| Other | Limit access to only personnel trained in the safe handling of this material. Consult a health and safety professional for specific PPE, respirator, and risk assessment guidance. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | Pharmaceutical tablet or capsule | Physical State | Solid |
| :---: | :---: | :---: | :---: |
| Color | Various | Odor | Not available |
| Odor Threshold | Not available |  |  |
| Molecular Formula | Not applicable | Molecular Weight | Not applicable |
| pH | Not applicable |  |  |
| Specific Gravity | Not applicable | Water Solubility | Not available |
| Solubility | Not applicable | Evaporation Rate | Not applicable |
| Partition Coefficient (n-octanol/water) | Not available | Vapor Pressure | Not applicable |
| Boiling Point | Not applicable | Autoignition Temperature | Not applicable |
| Flash Point | Not available | Method | None |
| Melting Point | Not available |  |  |
| Flammability Limits in Air | Upper Not applicable | Lower Not applicable |  |
| Explosion Limits | Upper Not applicable | Lower Not applicable |  |

## 10. STABILITY AND REACTIVITY

| Chemical Stability | Stable at room temperature. |
| :--- | :--- |
| Conditions to Avoid | No data available |
| Materials to Avoid | No materials to be especially mentioned. |
| Hazardous Decomposition Products | None under normal use. |
| Possibility of Hazardous Reactions | None under normal use. |
|  | 11. TOXICOLOGICAL INFORMATION |

The following effects are based on the Active Pharmaceutical Ingredient.

| Acute Toxicity |  |
| :---: | :---: |
| Isosorbide dinitrate |  |
| LD50 Oral | $\sim 1100 \mathrm{mg} / \mathrm{kg}$, rats |
| Acute Dermal Irritation | No data available |
| Primary Eye Irritation | No data available |
| Sensitization | No data available |
| Multiple Dose Toxicity |  |
| Isosorbide dinitrate |  |
| No Toxicologic Effect Dose/Species/Study Length: | No data available |

## Maximum Tolerated Dose (MTD), Oral

Isosorbide dinitrate
Carcinogenicity
Genetic Toxicity
Reproductive Toxicity
Developmental Toxicity

No evidence of carcinogenicity was observed in rats.
No evidence of mutagenicity was observed in a battery of in vitro and in vivo assays.
Studies in rats were found to have no effect on fertility.
Studies in rats given at oral doses of 35 and 150 times the maximum daily-recommended human dose have shown a dose-related increase in embryotoxicity.

## Isosorbide dinitrate

Target Organ(s) of Toxicity No data available

## 12. ECOLOGICAL INFORMATION

The following effects are based on the Active Pharmaceutical Ingredient.

| Chemical Fate Information | Not available |
| :--- | :--- |
| Ecotoxicity | Not available |

## 13. DISPOSAL CONSIDERATIONS

Waste Disposal Method
Dispose of in accordance with local and national regulations.

## 14. TRANSPORT INFORMATION

## Transport Information

This material is not classified as hazardous for transport.

| U.S. Department of Transport (DOT) | Not regulated |
| :--- | :--- |
| Canadian Transport of Dangerous Goods (TDG) | Not regulated |
| International Civil Aviation Organization (ICAO) | Not regulated |
| International Air Transport Association (IATA) | Not regulated |
| International Maritime Dangerous Goods (IMDG)/International | Not regulated |
| Maritime Organization (IMO) |  |
| Transport of Dangerous Goods by Rail (RID) | Not regulated |
| Transport of Dangerous Goods by Road (ADR) | Not regulated |
| Transportation of Dangerous Goods via Inland Waterways Not regulated <br> (ADN)  |  |

## 15. REGULATORY INFORMATION

## USA

## Federal Regulations

## OSHA Regulatory Status

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

## SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372.

## SARA 311/312 Hazardous Categorization Acute Health Hazard No Chronic Health Hazard No Fire Hazard No <br> Sudden Release of Pressure Hazard No <br> Reactive Hazard No

This product does not contain any HAPs.

## State Regulations

## California Proposition 65

This product does not contain any Proposition 65 chemicals.

## Canada

Not classified

## WHMIS Hazard Class

Non-controlled

## European Union

In accordance with EC directives or respective national laws, the product does not need to be classified nor labeled.

## 16. OTHER INFORMATION

## Prepared By

Format
List of References
Revision Summary

Wyeth Department of Environment, Health \& Safety
This MSDS was prepared in accordance with ANSI Z400.1-2004.
See Patient Package Insert for more information.
Not applicable

## Disclaimer:

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