



MATERIAL SAFETY DATA SHEET

Revision date: 02-Jan-2007

Version: 1.1

Page 1 of 6

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

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

Material Name: Nicergoline Powder and Solvent for Injectable Solution and for Infusion

Trade Name: Sermion Powder and Solvent for Injectable Solution and for Infusion, 4 mg/2 ml, 4 mg/4 ml
Chemical Family: Mixture
Intended Use: Pharmaceutical product used as cognition activator

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous

Ingredient	CAS Number	EU EINECS List	%
Nicergoline	27848-84-6	248-694-6	4 mg####
Benzalkonium chloride	8001-54-5	Not listed	*

Ingredient	CAS Number	EU EINECS List	%
Lactose	63-42-3	200-559-2	*
Sodium chloride	7647-14-5	231-598-3	*
Water for injection	7732-18-5	231-791-2	*
Tartaric acid	87-69-4	201-766-0	*

Additional Information: * Proprietary
per vial/cartridge/ampule
Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety.

3. HAZARDS IDENTIFICATION

Appearance: Powder / Clear, colorless liquid
Signal Word: WARNING

Statement of Hazard: May be harmful if swallowed.

Short Term: May cause drowsiness, insomnia, nervousness, and dizziness.
Known Clinical Effects: Ingestion of this material may cause effects similar to those seen in clinical use including hypotension (low blood pressure), dizziness, headache and drowsiness. Adverse effects associated with the therapeutic use include skin rash and gastrointestinal disturbances.

EU Indication of danger: Harmful

EU Hazard Symbols:

MATERIAL SAFETY DATA SHEET

Material Name: Nicergoline Powder and Solvent for Injectable
Solution and for Infusion
Revision date: 02-Jan-2007

Page 2 of 6

Version: 1.1



EU Risk Phrases:

R22 - Harmful if swallowed.

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.

4. FIRST AID MEASURES

- Eye Contact:** If irritation occurs or persists, get medical attention. Flush eyes with water as a precaution
- 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:** Emits toxic fumes of carbon monoxide, carbon dioxide, oxides of nitrogen and bromine-containing compounds
- 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 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.
- 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 contact with eyes, skin and clothing. Wash thoroughly after handling.

MATERIAL SAFETY DATA SHEET

Material Name: Nicergoline Powder and Solvent for Injectable
Solution and for Infusion
Revision date: 02-Jan-2007

Page 3 of 6

Version: 1.1

Storage Conditions: Store at room temperature in properly labeled containers. Keep away from heat, sparks and flames.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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.

Nicergoline

Pfizer Occupational Exposure Band (OEB): OEB3 (control exposure to the range of $>10\mu\text{g}/\text{m}^3$ to $<100\mu\text{g}/\text{m}^3$)

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 within the OEB range.

Personal Protective Equipment:

Hands: Wear protective gloves when working with large quantities.
Eyes: Not required under normal conditions of use. Wear safety glasses or goggles if eye contact is possible.
Skin: Not required for the normal use of this product. Wear protective clothing when working with large quantities.
Respiratory protection: Not required for the normal use of this product. 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:	Powder / Liquid	Color:	No data available. / Colorless
Molecular Formula:	Mixture	Molecular Weight:	Mixture

10. STABILITY AND REACTIVITY

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)

Lactose

Rat Oral LD50 > 10 g/kg

MATERIAL SAFETY DATA SHEET

Material Name: Nicergoline Powder and Solvent for Injectable
Solution and for Infusion
Revision date: 02-Jan-2007

Page 4 of 6

Version: 1.1

Sodium chloride

Rat Oral LD50 3000 mg/kg
Mouse Oral LD 50 4000 mg/kg

Benzalkonium chloride

Rat Oral LD50 240 mg/kg

Nicergoline

Rat Oral LD 50 1193 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)

Sodium chloride

Eye Irritation Rabbit Moderate
Skin Irritation Rabbit Mild

Benzalkonium chloride

Skin Irritation Rabbit Moderate
Eye Irritation Rabbit Severe

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

Sodium chloride

10 Day(s) Rat Oral 12500 mg/kg LOAEL Kidney, Ureter, Bladder

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

Nicergoline

Embryo / Fetal Development Rat Oral Not teratogenic
Embryo / Fetal Development Rabbit Fetotoxicity
Embryo / Fetal Development Rat Intramuscular Not Teratogenic

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.

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.

MATERIAL SAFETY DATA SHEET

Material Name: Nicergoline Powder and Solvent for Injectable
Solution and for Infusion
Revision date: 02-Jan-2007

Page 5 of 6

Version: 1.1

15. REGULATORY INFORMATION

EU Symbol: Xn
EU Indication of danger: Harmful

EU Risk Phrases:
R22 - Harmful if swallowed.

EU Safety Phrases:
S22 - Do not breathe dust.
S24/25 - Avoid contact with skin and eyes.

OSHA Label:
WARNING
May be harmful if swallowed.

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.

Nicergoline

Standard for the Uniform Scheduling for Drugs and Poisons:	Schedule 4
EU EINECS List	248-694-6

Lactose

Inventory - United States TSCA - Sect. 8(b)	Present
Australia (AICS):	Present
EU EINECS List	200-559-2

Sodium chloride

Inventory - United States TSCA - Sect. 8(b)	Present
Australia (AICS):	Present
EU EINECS List	231-598-3

Water for injection

Inventory - United States TSCA - Sect. 8(b)	Present
Australia (AICS):	Present
EU EINECS List	231-791-2

Benzalkonium chloride

Australia (AICS):	Present
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MATERIAL SAFETY DATA SHEET

Material Name: Nicergoline Powder and Solvent for Injectable
Solution and for Infusion
Revision date: 02-Jan-2007

Page 6 of 6

Version: 1.1

Standard for the Uniform Scheduling
for Drugs and Poisons:

Schedule 5
Schedule 6

Tartaric acid

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

Present

Australia (AICS):

Present

EU EINECS List

201-766-0

16. OTHER INFORMATION

Reasons for Revision:

Updated Section 2 - Composition / Information on Ingredients. Updated Section 3 - Hazard Identification. Updated Section 8 - Exposure Controls / Personal Protection. Updated Section 11 - Toxicology Information. Updated Section 13 - Disposal Considerations.

Prepared by:

Toxicology and Hazard Communication
Pfizer Global Environment, Health, and Safety

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End of Safety Data Sheet