

Section 1: IDENTIFICATION OF SUBSTANCE AND SOCIETY

1.1. Identification of the substance

Product form: Solution for injection

Product name: Anticholium®

Active substance : Physostigmine salicylate.

Chemical name : [(3aR,8bS)-3,4,8b-trimethyl-2,3a-dihydro-1H-pyrrolo[2,3-b]indol-7-yl] N-methylcarbamate;2-hydroxybenzoic acid

National Drug Code (NDC): 81284-831-05

Molecular formula: Physostigmine salicylate : C₁₅H₂₁N₃O₂ • C₇H₆O₃.

1.2. Uses

As an antidote or antagonist in cases of poisoning or overdose
For professional use only

1.3. Information about the security data sheet provider

| Company | Distributor |
|---|--|
| Provepharm SAS 22 Rue Marc Donadille 13013 Marseille, France Phones: 04 91 08 69 30 Website: www.provepharm.com Email: hse@provepharm.com | Provepharm Inc. 100 Springhouse drive, Suite 105, Collegeville, PA 19426, USA Phone: +1 610 601 8600 |

1.4. Emergency telephone number:

CHEMTREC: 1-800-424-9300 (within USA and Canada), +1 703-527-3887 (outside USA and Canada).

Section 2: HAZARDS IDENTIFICATION

2.1. Potential health hazards

Carcinogenicity : Not available

Mutagenicity : Not available

Teratogenicity : Not available

Developmental toxicity : Not available

May cause irritation of the eyes, skin, gastrointestinal and respiratory tract.

For side effects see Information for use.

2.2. Other hazards





Health Effects: Due to the sodium metabisulfite content, hypersensitivity reactions may occur in isolated cases, especially in asthmatics, which can manifest as retching, diarrhoea, wheezing, acute asthma attack, impaired consciousness or shock. These reactions can vary greatly between individuals and can also lead to life-threatening conditions. Under such conditions, a benefit-risk assessment is required when using ANTICHOLIUM® as an antidote in poisoning and a cortisone preparation must be readily available. Acute cardiac arrest is possible during treatment with tricyclic antidepressants, therefore continuous monitoring of the ECG is required when Anticholium is used as an antidote in this indication.

Section 3: COMPOSITION/INFORMATIONS ON THE SUBSTANCE

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | Quantity/mL | Classification |
|--------------------------|--|--|---|
| Physostigmine salicylate | CAS-No.: 57-64-7 Molecular weight: 413.5 g/mol EC number: 200-343-8 | 2.0 mg/5 mL (0.4 mg in 1 mL) | Acute Tox. 1, H300 Acute Tox. 2, H330  |
| Sodium metabisulfite | CAS-No.: 7681-57-4 Molecular weight: 190.11 g/mol EC number: 231-673-0 | 2.5 mg/5 mL (equivalent to: 1.68 mg SO ₂) | Acute Tox. 4, H302 Eye Dam. 1, H318  |
| Sodium edetate | | - | Acute Tox. 4, H332 STOT RE 2, H373   |
| Water for injection | CAS-No.: 7732-18-5 | - | Not listed |

Full text of hazard classes and H-statements: see section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

After inhalation: If inhaled, remove to fresh air. Seek medical attention immediately.

After skin contact: In case of contact, immediately wash skin with plenty of water and soap or mild detergent for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothes and thoroughly clean shoes before reuse. Seek medical attention immediately.

After eye contact: Check for and remove any contacts lenses. Immediately flush eyes with plenty of water or normal saline solution for at least 15 minutes. Seek medical attention immediately.

After ingestion: Wash out mouth with water and administer fresh water if the person is conscious. Do not induce vomiting unless directed to do so by a medical professional. Never give anything by mouth to an unconscious person. Loosen tight clothing such as tie, collar and/or belt. Seek medical attention immediately.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Use water spray, dry chemical, fog or foam.

Unsuitable extinguishing media: Not known.

5.2. Special hazards arising from the substance or mixture

Combustion Products: When heated to decomposition, it emits toxic fumes of nitrogen oxides.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

General Measures: Use personal protective equipment recommended in Section 8 of this document and isolate the hazard area.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE) as identified in section 8.

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection. Refer to section 8: Exposure controls/personal protection.

Emergency Procedures: Isolate the hazard area. Ventilate area.

6.2. Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers

6.3. Material for containment and cleaning up

Soak up with inert absorbent material and dispose as hospital waste. Wipe working area surfaces to dryness, and then wash with soap and water.

For proper waste disposal, see section 13 of the SDS.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Recommendations for handling: Avoid exposure to light, air, moisture and excessive heat.
Handle in a well-ventilated place.
Avoid contact with incompatible materials.
Wear suitable Personal Protection Equipment (see section 8).
Keep the substance/mixture away from drains, surface or ground waters.

Recommendations for personal hygiene: Do not eat, drink and smoke in the working areas.
Wash hands after handling the substance/mixture.
Remove contaminated clothing and protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Storage: Do not expose to heat sources or high temperature.
Keep container tightly closed. Keep container in a cool. Store not above 25°C. (77°F).
Do not expose to sunlight. Store in the outer packaging.
In the intact container: 3 years
The solution for infusion must be used immediately after preparation.
Keep this medicine out of the sight and reach of children.
Do not use this medicine after the expiry date which is stated on the carton or label after "EXP". The expiry date refers to the last day of that month

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limit: Not available.

8.2. Exposure controls

Appropriate engineering controls: Handle in accordance with good clinical hygiene and safety practice. Wash hands before breaks and at the end of the day.

Hand protection: Handle with gloves (Nitrile rubber). Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. (in accordance with EN374, ASTM F1001 or international equivalent).

Eye protection: Wear safety glasses or goggles if eye contact is possible (in accordance with EN166, ANSI Z87.1 or international equivalent).

Skin and body protection: Wear suitable working clothes.

Respiratory protection: Not required

Control of environmental exposure: Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| | |
|---|-----------------------------------|
| Physical state: | clear solution |
| Appearance: | liquid |
| Color: | colorless to slightly reddish |
| Odor: | No data available |
| Odor threshold: | No data available |
| pH: | pH 3.0 – 4.0 |
| Melting point: | No data available |
| Freezing point: | No data available |
| Boiling point: | No data available |
| Flash point: | Not applicable |
| Relative evaporation rate (butyl acetate=1): | No data available |
| Flammability (solid, gas): | Not applicable |
| Vapor pressure: | No data available |
| Relative vapor density at 20 °C: | No data available |
| Absolut density: | 0.9900 – 1.0100 g/cm ³ |
| Solubility: | Solution |
| Partition coefficient n-octanol/water (Log Pow): | No data available |
| Auto-ignition temperature: | No data available |
| Decomposition temperature: | No data available |
| Viscosity, kinematic: | No data available |
| Viscosity, dynamic: | No data available |
| Explosion limits: | Not applicable |
| Explosive properties: | No data available |
| Oxidizing properties: | No data available |

9.2. Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product is stable under normal conditions.

10.2. Chemical stability

The product is stable at handling and recommended storage conditions.

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

No data available

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

If heated at high temperatures, the substance/mixture decomposes.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:

Physostigmine salicylate:

LD50 (oral), rat: 7-10 mg/kg

Sodium metabisulfite:

LD50 (oral), rat: 1540 mg/kg

LC50 (inhalation), rat: > 5.5 mg/l/4h

LD50 (dermal), rat: > 2000 mg/kg

Sodium edetate:

LD50 (oral), rat: > 2000 mg/kg

Potential Chronic Toxicity

Germ Cell Mutagenicity: No data

Carcinogenicity: No data

Reproductive Toxicity: No data.

Developmental: No data

Specific Target Organ Toxicity (Single Exposure): No data

Specific Target Organ Toxicity (Repeated Exposure): No data

Aspiration Hazard: No data

Toxicity studies with single administration have shown that the average lethal dose in rats is 1.28 mg/kg bodyweight after intramuscular administration, in rabbits it is 1.57 mg/kg bodyweight. An average lethal dose of 310 µg/kg bodyweight in mice and of 910 µg/kg bodyweight in rabbits has been determined after intravenous administration. Death occurred after unconsciousness and respiratory arrest.

Pregnancy: No data.

Physostigmine, the active substance contained in ANTICHOLIUM®, passes into the placenta. Animal studies are insufficient with respect to effects on pregnancy, embryonal/foetal development, birth and postnatal development. The potential risk for humans is unknown.

Breast-feeding: No data

11.2. Additional information

Due to the sodium metabisulfite content, hypersensitivity reactions may occur in isolated cases, especially in asthmatics, which can manifest as retching, diarrhoea, wheezing, acute asthma attack, impaired consciousness or shock. These reactions can vary greatly between individuals and can also lead to life-threatening conditions. Under such conditions, a benefit-risk assessment is required when using ANTICHOLIUM® as an antidote in poisoning and a cortisone preparation must be readily available. Acute cardiac arrest is possible during treatment with tricyclic antidepressants, therefore continuous monitoring of the ECG is required when Anticholium is used as an antidote in this indication.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

No data available.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Advice on disposal: Dispose of waste in accordance with all applicable federal, state and local laws.

Waste disposal number of waste from residues/unused products : Dispose of waste in accordance with federal, state and local environment control regulations.

Contaminated packaging: Empty containers should be taken for local waste disposal. Contaminated packaging should be emptied as far as possible. Packaging that cannot be cleaned should be disposed of like the product.

SECTION 14: TRANSPORT INFORMATION

Pharmaceutical Waste : Physostigmine salicylate P1888

UN Number: 1851*

UN Proper Shipping Name: Medicine, liquid, toxic, n.o.s.*

Transport Hazard Class(es): Class 6.1 – poisonous material.*

Packing Group: PGII*

*Information for Physostigmine salicylate diluted at 0.1%

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

U.S. Regulations:

Toxic Substance Control Act (TSCA): Yes

CERCLA Hazardous Substance: Physostigmine Salicylate (CAS 57-64-7) Listed

EPCRA Extremely Hazardous Substances and Toxic Chemicals:

| Ingredient | Section 302 | Section 313 |
|--|----------------|-------------|
| physostigmine salicylate (CAS 57-64-7) | 100/10,000 lbs | No |

15.2. U.S. STATE RIGHT-TO-KNOW REGULATIONS

| Ingredient | New jersey | Pennsylvania | Massachussets | California Proposition 65 |
|--|------------|--------------|---------------|---------------------------|
| physostigmine salicylate (CAS 57-64-7) | Listed | Listed | Listed | Not listed |

15.3. ECHA Status

EU – Regulations

No REACH Annex XVII restrictions

Anticholium® is not on the REACH Candidate List

Anticholium® is not on the REACH Annex XIV List

No hazardous substance in the sense of the EC directives / GefStoffV.



SECTION 16: OTHER INFORMATION

Anticholium® (German imported product)

At this time, no other entity except Provepharm or its distributor Direct Success is authorized by the FDA to import or distribute physostigmine salicylate injection in the U.S.

Effective immediately, Provepharm will distribute the following presentations of Anticholium® (physostigmine salicylate) to address the critical shortage:

| Product Description | Strength | Packaging | NDC number | Lot/ Batch # | Expiration Date (Labeled) |
|---|---|------------------|--------------|-----------------|------------------------------|
| Anticholium® (physostigmine salicylate) | 2 mg/5 mL (0.4 mg/mL) injection for intravenous use | 5 x 5 mL ampules | 81284-831-05 | 2315751 | 2026-05-31 |

Full text of H-phrases:

| | |
|--------------|---|
| Acute Tox 1 | Acute toxicity (Category 1) |
| Acute Tox 2 | Acute toxicity (Category 2) |
| Acute Tox. 4 | Acute toxicity (Category 4) |
| Eye Dam. 1 | Eye damage (Category 1) |
| STOT RE 2 | Specific target organ toxicity - repeated exposure, category 2 |
| H300 | Fatal if swallowed |
| H330 | Fatal if inhaled |
| H302 | Harmful if swallowed |
| H318 | Causes serious eye damage |
| H332 | Harmful if inhaled |
| H373 | May cause damage to organs through prolonged or repeated exposure |