

1. Identification

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| Product identifier | Anileridine Hydrochloride | | |
| Other means of identification | | | |
| Catalog number | 1036008 | | |
| Chemical name | 4-Piperidinecarboxylic acid, 1-[2-(4-aminophenyl)ethyl]-4-phenyl-, ethyl ester, dihydrochloride | | |
| Recommended use | Specified quality tests and assay use only. | | |
| Recommended restrictions | Not for use as a drug. Not for administration to humans or animals. | | |
| Manufacturer/Importer/Supplier/Distributor information | | | |
| Manufacturer | | | |
| Company name | U. S. Pharmacopeia | | |
| Address | 12601 Twinbrook Parkway Rockville MD 20852-1790 United States | | |
| Telephone | RS Technical Services | 301-816-8129 | |
| Website | www.usp.org | | |
| E-mail | RSTECH@usp.org | | |
| Emergency phone number | CHEMTREC within US & Canada | 1-800-424-9300 | |
| | CHEMTREC outside US & Canada | +1 703-527-3887 | |

2. Hazard(s) identification

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| Physical hazards | Not classified. | | |
| Health hazards | Acute toxicity, oral | Category 3 | |
| | Specific target organ toxicity, single exposure | Category 3 narcotic effects | |
| Environmental hazards | Not classified. | | |
| OSHA defined hazards | Not classified. | | |
| Label elements | | | |



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| Signal word | Danger | | |
| Hazard statement | Toxic if swallowed. May cause drowsiness or dizziness. | | |
| Precautionary statement | | | |
| Prevention | Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. | | |
| Response | If swallowed: Immediately call a poison center/doctor. Rinse mouth. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. | | |
| Storage | Store in a well-ventilated place. Keep container tightly closed. Store locked up. | | |
| Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. | | |
| Hazard(s) not otherwise classified (HNOC) | Not classified. | | |
| Other hazards which do not result in classification | None known. | | |

3. Composition/information on ingredients

Substance

| Chemical name | Common name and synonyms | CAS number | % |
|---------------------------|--------------------------|------------|-----|
| Anileridine Hydrochloride | | 126-12-5 | 100 |

4. First-aid measures

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| Inhalation | Move to fresh air. Call a POISON CENTER or doctor/physician if you feel unwell. |
| Skin contact | Rinse skin with water/shower. Get medical attention if irritation develops and persists. |
| Eye contact | Rinse with water. Get medical attention if irritation develops and persists. |
| Ingestion | Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. |
| Most important symptoms/effects, acute and delayed | Narcotic effects. |
| Indication of immediate medical attention and special treatment needed | Treatment of opioid analgesic overdose should be symptomatic and supportive and may include the following: Do not induce vomiting. Administer activated charcoal as a slurry. Monitor vital signs, pulse oximetry, and cardiac function. Monitor for CNS and respiratory depression. For respiratory depression, administer oxygen and assist ventilation. Protect airway with orotracheal intubation. For coma and respiratory depression, reverse with naloxone. Administer intravenously, intramuscularly, intratracheally, intranasally, or subcutaneously. A continuous infusion might be needed for long-acting opioids. For seizures, treat with intravenous benzodiazepines. If seizures persist, administer propofol or barbiturates. For hypotension, treat with an infusion of isotonic fluid. If hypotension persists, administer dopamine or norepinephrine. Hemodialysis and hemoperfusion are not recommended. (Poisindex) |
| General information | Remove from exposure. Remove contaminated clothing. For treatment advice, seek guidance from an occupational health physician or other licensed health-care provider familiar with workplace chemical exposures. In the United States, the national poison control center phone number is 1-800-222-1222. If person is not breathing, give artificial respiration. If breathing is difficult, give oxygen if available. Persons developing serious hypersensitivity (anaphylactic) reactions must receive immediate medical attention. |

5. Fire-fighting measures

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| Suitable extinguishing media | Use fire-extinguishing media appropriate for surrounding materials. Water. Foam. Dry chemical or CO ₂ . |
| Unsuitable extinguishing media | None known. |
| Specific hazards arising from the chemical | No unusual fire or explosion hazards noted. |
| Special protective equipment and precautions for firefighters | Wear suitable protective equipment. |
| Fire-fighting equipment/instructions | Use water spray to cool unopened containers. As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. |

6. Accidental release measures

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| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Avoid inhalation of dust from the spilled material. Wear appropriate personal protective equipment. |
| Methods and materials for containment and cleaning up | Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid the generation of dusts during clean-up. For waste disposal, see section 13 of the SDS. Clean surface thoroughly to remove residual contamination. |

7. Handling and storage

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| Precautions for safe handling | As a general rule, when handling USP Reference Standards, avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Clean equipment and work surfaces with suitable detergent or solvent after use. After removing gloves, wash hands and other exposed skin thoroughly. |
| Conditions for safe storage, including any incompatibilities | Store in tight container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity. |

8. Exposure controls/personal protection

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| Biological limit values | No biological exposure limits noted for the ingredient(s). |
| Exposure guidelines | No exposure standards allocated. |

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| Appropriate engineering controls | Airborne exposure should be controlled primarily by engineering controls such as general dilution ventilation, local exhaust ventilation, or process enclosure. Local exhaust ventilation is generally preferred to general exhaust because it can control the contaminant at its source, preventing dispersion into the work area. An industrial hygiene survey involving air monitoring may be used to determine the effectiveness of engineering controls. Effectiveness of engineering controls intended for use with highly potent materials should be assessed by use of nontoxic surrogate materials. Local exhaust ventilation such as a laboratory fume hood or other vented enclosure is recommended, particularly for grinding, crushing, weighing, or other dust-generating procedures. |
| Individual protection measures, such as personal protective equipment | |
| Eye/face protection | Safety glasses with sideshields are recommended. Face shields or goggles may be required if splash potential exists or if corrosive materials are present. Approved eye protection (e.g., bearing the ANSI Z87 or CSA stamp) is preferred. Maintain eyewash facilities in the work area. |
| Skin protection | |
| Hand protection | Chemically compatible gloves. For handling solutions, ensure that the glove material is protective against the solvent being used. Use handling practices that minimize direct hand contact. Employees who are sensitive to natural rubber (latex) should use nitrile or other synthetic nonlatex gloves. Use of powdered latex gloves should be avoided due to the risk of latex allergy. |
| Other | For handling of laboratory scale quantities, a cloth lab coat is recommended. Where significant quantities are handled, work clothing may be necessary to prevent take-home contamination. |
| Respiratory protection | Where respirators are deemed necessary to reduce or control occupational exposures, use NIOSH-approved respiratory protection and have an effective respirator program in place (applicable U.S. regulation OSHA 29 CFR 1910.134). |
| General hygiene considerations | Handle in accordance with good industrial hygiene and safety practice. |

9. Physical and chemical properties

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| Appearance | White or almost white crystalline powder. |
| Physical state | Solid. |
| Form | Powder. |
| Odor | Odorless. |
| Odor threshold | Not available. |
| pH | 2.5 - 3 (in a 5% aqueous solution). |
| Melting point/freezing point | 518 - 548.6 °F (270 - 287 °C) (decomposes). |
| Initial boiling point and boiling range | Not available. |
| Flash point | Not available. |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | < 0.0000001 kPa at 25 °C |
| Vapor density | Not available. |
| Relative density | Not available. |
| Solubility in water | Freely soluble. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Chemical family | Piperidine derivative. |
| Molecular formula | C ₂₂ H ₂₈ N ₂ O ₂ · 2HCl |
| Molecular weight | 425.39 |
| Solubility (other) | Sparingly soluble in ethanol; practically insoluble in ether and in chloroform. |

10. Stability and reactivity

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| Reactivity | Not available. |
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| Chemical stability | Stable at normal conditions. |
| Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | None known. |
| Incompatible materials | None known. |
| Hazardous decomposition products | Cl-. NOx. Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions. |

11. Toxicological information

Information on likely routes of exposure

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| Ingestion | Toxic if swallowed. |
| Inhalation | Due to lack of data the classification is not possible. |
| Skin contact | Due to lack of data the classification is not possible. |
| Eye contact | Due to lack of data the classification is not possible. |
| Symptoms related to the physical, chemical, and toxicological characteristics | Opioid analgesics: Dizziness. Drowsiness. Weakness. Restlessness. Euphoria. Depression. Agitation. Confusion. Hallucinations. Slurred speech. Nausea. Vomiting. Constipation. Decreased or difficult urination. Sweating. Flushing. Itching. Rash. Cold and clammy skin. Difficulty breathing. Loss of consciousness. Pinpoint pupils. Muscle rigidity. Convulsions. Seizures. |
| Delayed and immediate effects of exposure | Opioid analgesics: Low blood pressure. Slow or irregular heart rate. Hypothermia. Tolerance. Dependence. Coma. Heart attack. Death. |
| Medical conditions aggravated by exposure | Opioid analgesics: Liver impairment. Kidney impairment. Hypothyroidism. Seizure disorders. Asthma. Respiratory disorders. Heart arrhythmia. Alcoholism. History of drug abuse or dependence. Gallbladder disorders. Inflammatory bowel disease. Urinary disorders. Low blood pressure. Gastrointestinal obstruction. Adrenal gland problems. Sickle cell disease. Addison's disease. Concurrent use of monoamine oxidase inhibitors (MAOIs). |
| Acute toxicity | Toxic if swallowed. |
| Skin corrosion/irritation | Due to lack of data the classification is not possible. |
| Serious eye damage/eye irritation | Due to lack of data the classification is not possible. |
| Respiratory or skin sensitization | |
| Respiratory sensitization | Due to lack of data the classification is not possible. |
| Skin sensitization | Due to lack of data the classification is not possible. |
| Germ cell mutagenicity | Due to lack of data the classification is not possible. |
| Carcinogenicity | Due to lack of data the classification is not possible. |
| Reproductive toxicity | Due to lack of data the classification is not possible. |
| Specific target organ toxicity - single exposure | May cause drowsiness or dizziness. |
| Specific target organ toxicity - repeated exposure | Due to lack of data the classification is not possible. |
| Aspiration hazard | Based on available data, the classification criteria are not met. |

12. Ecological information

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| Ecotoxicity | There are no data on the ecotoxicity of this product. |
| Persistence and degradability | No data is available on the degradability of this product. |
| Bioaccumulative potential | Not available. |
| Mobility in soil | Not available. |
| Other adverse effects | Not available. |

13. Disposal considerations

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| Disposal instructions | Dispose in accordance with all applicable regulations. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. |
| Local disposal regulations | Dispose of in accordance with local regulations. |
| Hazardous waste code | Not regulated. |
| Waste from residues / unused products | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. |

14. Transport information

DOT

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| UN number | UN2811 |
| UN proper shipping name | Toxic solid, organic, n.o.s. (Anileridine Hydrochloride) |
| Transport hazard class(es) | |
| Class | 6.1 |
| Subsidiary risk | - |
| Packing group | III |

IATA

| | |
|----------------------------|--|
| UN number | UN2811 |
| UN proper shipping name | Toxic solid, organic, n.o.s. (Anileridine Hydrochloride) |
| Transport hazard class(es) | |
| Class | 6.1 |
| Subsidiary risk | - |
| Packing group | III |
| Other information | |

Passenger and cargo aircraft

Allowed.

Cargo aircraft only

Allowed.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available.

DOT; IATA



15. Regulatory information

US federal regulations CERCLA/SARA Hazardous Substances - Not applicable.

One or more components are not listed on TSCA.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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|-------------------|------------------------|
| Hazard categories | Immediate Hazard - Yes |
| | Delayed Hazard - No |
| | Fire Hazard - No |
| | Pressure Hazard - No |
| | Reactivity Hazard - No |

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Safe Drinking Water Act (SDWA)

Not regulated.

Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)

Schedule II - 9020

Food and Drug Administration (FDA)

Not regulated.

US state regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US. California Proposition 65

Not Listed.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | No |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | No |
| New Zealand | New Zealand Inventory | No |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | No |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

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|-----------------------------|--|
| Issue date | 10-21-2010 |
| Revision date | 09-09-2015 |
| Version # | 04 |
| Further information | Not available. |
| Disclaimer | USP Reference Standards are sold for chemical test and assay purposes only, and NOT for human consumption. The information contained herein is applicable solely to the chemical substance when used as a USP Reference Standard and does not necessarily relate to any other use of the substance described, (i.e. at different concentrations, in drug dosage forms, or in bulk quantities). USP Reference Standards are intended for use by persons having technical skill and at their own discretion and risk. This information has been developed by USP staff from sources considered reliable but has not been independently verified by the USP. Therefore, the USP Convention cannot guarantee the accuracy of the information in these sources nor should the statements contained herein be considered an official expression. NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE is made with respect to the information contained herein. |
| Revision Information | Physical & Chemical Properties: Multiple Properties GHS: Classification |