

Section 1: Identification

Product Name Midazolam USP CIV
Commercial Name Midazolam
Product Use Not available
Restrictions On Use Not available
Product Code 24-4705
Company PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: Acute toxicity, oral Category 3 Serious eye damage/eye irritation Category 2B Reproductive toxicity Category
CFR 1910.1200 2 Specific target organ toxicity, single exposure Category 3 narcotic effects
Signal Word DANGER
Hazard Statement(s) Toxic if swallowed.
Pictogram(s) or Symbol(s)

**Precautionary Statement(s):**

Prevention Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area.
Response If swallowed: Immediately call a poison center/doctor. Rinse mouth. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If exposed or concerned: Get medical advice/attention.
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.

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components Midazolam
% By Weight 100
CAS# 59467-70-8
Molecular Weight N/A
Chemical Formula C18H13ClFN3
Synonym(s) 8-Chloro-6-(o-fluorophenyl)-1-methyl-4H-imidazo(1,5-a) (1,4) benzodiazepine

Mixtures

| Name | CAS# | % by Weight | TLV/PEL | LC50/LD50 |
|-------------|-------------|--------------------|----------------|------------------|
| Midazolam | 59467-70-8 | 100 | Not available | Not available |

Section 4: First-Aid Measures

| | |
|-------------------------|---|
| Inhalation | If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist. |
| 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 | Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately. |
| Symptoms/Effects | |
| Acute | Narcotic effects. Irritation of eyes and mucous membranes. |
| Delayed | N/A |

Immediate Medical Attention

Treatment of benzodiazepine overdose should be symptomatic and supportive and may include the following: Do NOT induce vomiting. Administer activated charcoal as a slurry. If patient is unconscious, perform gastric lavage with cuffed endotracheal tube. Monitor respiration, pulse, and blood pressure, and maintain an adequate airway. Give intravenous fluids to control blood pressure. Forced diuresis is ineffective. For hypotension, administer intravenous isotonic fluid or vasopressors such as dopamine or norepinephrine. For respiratory depression, administer oxygen. Maintain adequate pulmonary ventilation. After airway, ventilation, and intravenous access have been secured, administer flumazenil, a specific benzodiazepine receptor antagonist, to reverse sedative effects. Monitor patient for return of sedation. Do NOT use barbiturates to control excitation. Dialysis is of no known value. (Meditext)

Section 5: Fire-Fighting Measures**Suitable Extinguishing Media**

Use fire-extinguishing media appropriate for surrounding materials. Water. Foam. Dry chemical or CO₂.

Unsuitable Extinguishing Media

N/A

Products of Combustion

No unusual fire or explosion hazards noted

Firefighters Special Equipment and Precautions

Wear suitable protective equipment. 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.

Section 6: Accidental Release Measures

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.

Section 7: Handling and Storage

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. Use of a designated area is recommended for handling of potent materials.

Storage: Store in tight container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity.

Section 8: Exposure Controls/Personal Protection

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|------------------------|-----|
| Exposure Limits | N/A |
|------------------------|-----|

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. Avoid any open handling of this material, particularly for grinding, crushing, weighing, or other dust-generating or aerosol-generating procedures. Use a laboratory fume hood, vented enclosure, glovebox, or other effective containment.

Personal Protection

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. To reduce the risk of contamination of skin and surfaces, wear two pairs of gloves. Remove the outer gloves after handling and cleanup of the material, and remove the inner gloves only after removing other personal protective equipment. **Other:** For handling of laboratory scale quantities, a disposable lab coat or isolation gown over street clothes is recommended. Where significant quantities are handled, work clothing and booties 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). **Thermal hazards:** Not available. **General hygiene considerations:** Handle in accordance with good industrial hygiene and safety practice.

Section 9: Physical and Chemical Properties

| | | | |
|---|---|--|--------------------------|
| Appearance | white or yellowish solid (crystalline powder) | | |
| Odor | Odorless | | |
| Odor Threshold | N/A | | |
| Melting Point | 298.4 - 320 °F (148 - 160 °C) | pH | N/A |
| Freezing Point | N/A | Vapor Pressure | < 0.0000001 kPa at 25 °C |
| Boiling Point/Range | N/A | Vapor Density | N/A |
| Decomposition temperature | N/A | Viscosity | N/A |
| Partition Coefficient: n-octanol/water | N/A | Evaporation Rate | N/A |
| Flash Point | N/A | Autoignition temperature | N/A |
| Flammability | N/A | Flammability or Explosive Limits: | |
| | | Lower | N/A |
| | | Upper | N/A |
| Solubility(ies) | Insoluble in water. Soluble in methanol and in ethanol; freely soluble in acetone. | | |
| Other | Chemical family Benzodiazepine. Molecular formula C ₁₈ H ₁₃ ClFN ₃ Molecular weight 325.77 | | |

Section 10: Stability and Reactivity

| | |
|---|---|
| Reactivity | No reactivity hazards known |
| Chemical Stability | Material is stable under normal conditions. |
| Hazardous Polymerization | No dangerous reaction known under conditions of normal use. |
| Conditions to Avoid | None known |
| Incompatible Materials | Oxidizing agents. Strong bases |
| Hazardous Decomposition Products | NO _x . Cl ₂ . F ₂ . Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions. |

Section 11: Toxicological Information**RTECS** N/A**Acute Toxicity**Toxic if swallowed. Oral: LD₅₀ Mouse 858 mg/kg Rat 362 mg/kg, 215 mg/kg**Skin Corrosion/Irritation**

N/A

Serious Eye Damage/Irritation

Causes eye irritation

Respiratory or Skin Sensitization

N/A

Germ Cell Mutagenicity

N/A

Carcinogenicity

N/A

Reproductive Toxicity

Suspected of damaging fertility or the unborn child. Most studies do not show a strong association between maternal therapeutic use of benzodiazepines and malformations in the offspring, although the risk of malformations may be increased. Withdrawal effects have been observed in newborns following maternal benzodiazepine use.

Routes of Entry

Ingestion, eye contact

Symptoms Related to Exposure

Benzodiazepines: Nausea. Diarrhea. Constipation. Cold, clammy skin. Headache. Weakness. Unsteadiness. Drowsiness. Dizziness. Fast or slow heartbeat. Difficulty breathing. Blurred or double vision. Slurred speech. Memory loss. Confusion. False sense of well-being. Hallucinations. Delirium. Seizures.

Potential Health Effects

Delayed: Benzodiazepines: Tolerance. Dependence. Withdrawal. Change in blood pressure. Coma. Death Alcohol or drug abuse. Glaucoma. Myasthenia gravis. Lung disease. Sleep apnea. Liver impairment. Kidney impairment. Seizure disorders, or history of. Mental disorders. Porphyrria

Target Organ(s) N/A

Section 12: Ecological Information**Ecotoxicity**

No ecotoxicity data noted for the ingredient(s)

Persistence and Degradability

N/A

Bioaccumulative Potential

N/A

Mobility in Soil

N/A

Other Adverse Effects

N/A

Section 13: Disposal Considerations**Waste Disposal**

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. 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

Disposal of Container

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.

Other Considerations

N/A

Section 14: Transport Information**DOT Classification**

DOT UN number: UN2811 UN proper shipping name: Toxic solid, organic, n.o.s. (Midazolam) Transport hazard class(es) 6.1
Subsidiary class(es) Not available. Packing group III

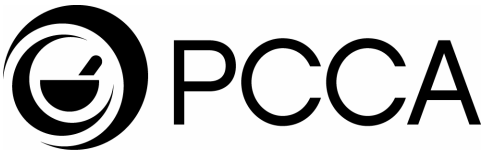
Section 15: Regulatory Information**Regulations**

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) Hazard categories Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No SARA 302 Extremely hazardous substance No SARA 311/312 Hazardous chemical No Other federal regulations Safe Drinking Water Act (SDWA) Not regulated. Drug Enforcement Administration (DEA) (21 CFR 1308.11-15) Schedule IV - 2884 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.

Other

N/A

Section 16: Other Information



Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Midazolam USP CIV

24-4705

N/A