

1 Identification of substance:

- **Product name:** Midazolam
- **Catalog number:** 451028
- **Manufacturer/Supplier:**
BD Discovery Labware
6 Henshaw Street
Woburn, MA 01801
Tel: 800.334.5229
- **Information department:** Technical Services
- **Emergency information:**
In case of a chemical emergency, spill, fire, exposure, or accident contact BD Discovery Labware at 800.334.5229, or ChemTrec at 800.424.9300.

2 Composition/Data on components:

- **Chemical characterization:**
- **CAS No. Description:**
59467-70-8 Midazolam

3 Hazards identification

- **Hazard description:**



Xn Harmful

- **Information pertaining to particular dangers for man and environment**
R 20 Harmful by inhalation.
R 36 Irritating to eyes.
R 48 Danger of serious damage to health by prolonged exposure.
- **NFPA ratings (scale 0-4)**



Health = 2
Fire = 0
Reactivity = 0

4 First aid measures

- **After inhalation**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek medical advice.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for 15 minutes under running water. Then consult a doctor.
- **After swallowing**
Immediately call a doctor.
If swallowed, rinse mouth with water (only if the person is conscious)

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Information for doctor Show the product label or this MSDS.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards caused by the material, its products of combustion or resulting gases:**
During heating or in case of fire toxic gases may be produced.
- **Protective equipment:**
Wear fully protective suit.
Use respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:**
Use respiratory protective device against the effects of fumes/dust/aerosol.
Avoid formation of dust.
- **Measures for environmental protection:** Wipe up with damp sponge or mop.
- **Measures for cleaning/collecting:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Additional information:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of dust.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** -20° C
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:**
Store under lock and key and with access restricted to technical experts or their assistants only.
Store in cool, dry conditions in well sealed containers.

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8 Exposure controls and personal protection

- **Additional information about design of technical systems:**
Use only in a chemical fume hood. Safety shower and eye bath.
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Personal Protective Equipment**
- **General protective and hygienic measures**
Avoid contact with the eyes and skin.
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:**
Suitable respiratory protective device recommended.
In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respirator.
- **Protection of hands:**



Chemical resistant gloves (i.e. nitrile, or equivalent).

- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing (lab coat).

9 Physical and chemical properties:

· General Information	
Form:	Powder
Color:	White
Odor:	unknown
· Change in condition	
Melting point/Melting range: 163°C (325°F)	
Boiling point/Boiling range: Not determined	
· Flash point:	Not applicable
· Flammability (solid, gaseous)	Product is not flammable.
· Danger of explosion:	Product does not present an explosion hazard.
· Vapor pressure:	Not applicable
· Density:	Not determined
· Solubility in / Miscibility with	
Water:	Insoluble
· pH-value:	Not applicable
· Formula Weight	325.77

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

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- **Materials to be avoided:** Incompatible material: strong oxidizers.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:**
Carbon monoxide (CO) and carbon dioxide (CO₂)
Hydrogen chloride (HCl)
Nitrogen oxides (NO_x)

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
 - **on the skin:** Irritant to skin and mucous membranes.
 - **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:** Target organs: central nervous system

12 Ecological information:

- **Ecotoxicological effects:**
- **Other information:**
The ecological effects have not been thoroughly investigated, but currently none have been identified.

13 Disposal considerations

- **Product:**
- **Recommendation**
Dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
Must not be disposed of with solid waste.
Dispose of material in accordance with federal (40 CFR 261), state and local requirements.
This product is not considered a RCRA hazardous waste.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to state and federal regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -

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- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

15 Regulations

- **SARA Section 355 (extremely hazardous substances)** Substance is not listed.
- **SARA Section 313 (specific toxic chemical listings)** Substance is not listed.
- **TSCA (Toxic Substances Control Act)** Substance is not listed.
- **California Proposition 65 - Chemicals known to cause cancer** Substance is listed.
- **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
- **Chemicals known to cause developmental toxicity:** Substance is listed.

- **Carcinogenicity categories**
- **IARC (International Agency for Research on Cancer)** Substance is not listed.
- **NTP (National Toxicology Program)** Substance is not listed.
- **TLV (Threshold Limit Value established by ACGIH)** Substance is not listed.

- **Product related hazard information:**
The product has been classified and marked in accordance with regulations on hazardous materials.

- **Hazard symbols:**
Xn Harmful

- **Risk phrases:**
20 Harmful by inhalation.
36 Irritating to eyes.
48 Danger of serious damage to health by prolonged exposure.

- **Safety phrases:**
1 Keep locked up.
7 Keep container tightly closed.
18 Handle and open container with care.
24 Avoid contact with skin.
28 After contact with skin, wash immediately with plenty of soap and water
39 Wear eye/face protection.

16 Other information:

Use of Product:

- synthetic chemical for research only
- analytical standard
- must be handled by suitably qualified personnel

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- **Department issuing MSDS:** Safety and Environment Department
- **Contact:** Technical Service Representative