

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : BENIDIPINE HCL

Product Number : B6813  
Brand : Sigma

Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +18003255832  
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Emergency Phone # : (314) 776-6555

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

##### OSHA Hazards

Toxic by ingestion

##### GHS Label elements, including precautionary statements

Pictogram



Signal word : Danger

Hazard statement(s)  
H301 : Toxic if swallowed.

Precautionary statement(s)  
P301 + P310 : IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

#### HMIS Classification

Health hazard: 2  
Flammability: 0  
Physical hazards: 0

#### NFPA Rating

Health hazard: 2  
Fire: 0  
Reactivity Hazard: 0

#### Potential Health Effects

**Inhalation** : May be harmful if inhaled. May cause respiratory tract irritation.  
**Skin** : May be harmful if absorbed through skin. May cause skin irritation.  
**Eyes** : May cause eye irritation.  
**Ingestion** : Toxic if swallowed.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : KW-3049

Formula : C<sub>28</sub>H<sub>31</sub>N<sub>3</sub>O<sub>6</sub>·HCl  
Molecular Weight : 542.02 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
<b>BENIDIPINE HCL</b>			
91599-74-5	-	-	-

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#### 4. FIRST AID MEASURES

##### General advice

Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

##### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

##### In case of eye contact

Flush eyes with water as a precaution.

##### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

##### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

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#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

##### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

##### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

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#### 7. HANDLING AND STORAGE

##### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

##### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 2 - 8 °C

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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

##### Personal protective equipment

##### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**

Handle with gloves. 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.

**Eye protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and body protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Hygiene measures**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

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**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Form                      solid

**Safety data**

pH	no data available
Melting point	no data available
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Water solubility	no data available

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**10. STABILITY AND REACTIVITY****Chemical stability**

Stable under recommended storage conditions.

**Conditions to avoid**

no data available

**Materials to avoid**

Strong oxidizing agents

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas

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**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

LD50 Oral - rat - 87.6 mg/kg

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Lacrimation. Lungs, Thorax, or Respiration:Dyspnea. Liver disorders

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

no data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

no data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Ingestion</b>	Toxic if swallowed.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Eyes</b>	May cause eye irritation.

**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Additional Information**

RTECS: US7975657

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**12. ECOLOGICAL INFORMATION****Toxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

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**13. DISPOSAL CONSIDERATIONS****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

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**14. TRANSPORT INFORMATION**

**DOT (US)**

UN-Number: 2811 Class: 6.1 Packing group: III  
Proper shipping name: Toxic solids, organic, n.o.s. (BENIDIPINE HCL)  
Marine pollutant: No  
Poison Inhalation Hazard: No

**IMDG**

UN-Number: 2811 Class: 6.1 Packing group: III EMS-No: F-A, S-A  
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (BENIDIPINE HCL)  
Marine pollutant: No

**IATA**

UN-Number: 2811 Class: 6.1 Packing group: III  
Proper shipping name: Toxic solid, organic, n.o.s. (BENIDIPINE HCL)

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**15. REGULATORY INFORMATION**

**OSHA Hazards**

Toxic by ingestion

**DSL Status**

This product contains the following components that are not on the Canadian DSL nor NDSL lists.

	CAS-No.
BENIDIPINE HCL	91599-74-5

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

	CAS-No.	Revision Date
BENIDIPINE HCL	91599-74-5	

**New Jersey Right To Know Components**

	CAS-No.	Revision Date
BENIDIPINE HCL	91599-74-5	

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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**16. OTHER INFORMATION**

**Further information**

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