

## SAFETY DATA SHEET

Revision Date 28-Mar-2019

Revision Number 2

### 1. Identification

**Product Name** 1-(4-Bromobenzyl)-4-methylperhydro-1,4-diazepine

**Cat No. :** CC55810DA; CC55810DE; CC55810FL; CC55810ZZ

**Synonyms** No information available

**Recommended Use** Laboratory chemicals.

**Uses advised against** Food, drug, pesticide or biocidal product use

#### Details of the supplier of the safety data sheet

##### Company

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Maybridge  
One Reagent Lane  
Fair Lawn, NJ 07410

##### **Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01

/ **Europe** call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 /

**Europe**: +32 14 57 52 99

**CHEMTREC** Tel. No.**US**:001-800-424-9300 /

**Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|                                                  |              |
|--------------------------------------------------|--------------|
| Skin Corrosion/irritation                        | Category 1 B |
| Serious Eye Damage/Eye Irritation                | Category 1   |
| Specific target organ toxicity (single exposure) | Category 3   |
| Target Organs - Respiratory system.              |              |

#### Label Elements

##### **Signal Word**

Danger

##### **Hazard Statements**

Causes severe skin burns and eye damage

May cause respiratory irritation

**Precautionary Statements****Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray  
Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Use only outdoors or in a well-ventilated area

**Response**

Immediately call a POISON CENTER or doctor/physician

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

**Skin**

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

**Ingestion**

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

**Storage**

Store locked up  
Store in a well-ventilated place. Keep container tightly closed

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None identified

### 3. Composition/Information on Ingredients

| Component                                        | CAS-No      | Weight % |
|--------------------------------------------------|-------------|----------|
| 1-(4-Bromobenzyl)-4-methylperhydro-1,4-diazepine | 280560-78-3 | > 97     |

### 4. First-aid measures

**General Advice**

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

**Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

**Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Call a physician immediately.

**Inhalation**

If not breathing, give artificial respiration. Remove from exposure, lie down. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician immediately.

**Ingestion**

Do NOT induce vomiting. Clean mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.

|                                            |                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Most important symptoms and effects</b> | Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation |
| <b>Notes to Physician</b>                  | Treat symptomatically                                                                                                                                                                                                                                                                           |

## 5. Fire-fighting measures

|                                         |                                                                                                                                   |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <b>Suitable Extinguishing Media</b>     | Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Chemical foam. CO <sub>2</sub> , dry chemical, dry sand, alcohol-resistant foam. |
| <b>Unsuitable Extinguishing Media</b>   | No information available                                                                                                          |
| <b>Flash Point</b>                      | No information available                                                                                                          |
| <b>Method -</b>                         | No information available                                                                                                          |
| <b>Autoignition Temperature</b>         | No information available                                                                                                          |
| <b>Explosion Limits</b>                 |                                                                                                                                   |
| <b>Upper</b>                            | No data available                                                                                                                 |
| <b>Lower</b>                            | No data available                                                                                                                 |
| <b>Sensitivity to Mechanical Impact</b> | No information available                                                                                                          |
| <b>Sensitivity to Static Discharge</b>  | No information available                                                                                                          |

### Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes.

### Hazardous Combustion Products

Nitrogen oxides (NO<sub>x</sub>) Carbon monoxide (CO) Carbon dioxide (CO<sub>2</sub>) Hydrogen halides Bromine

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

### NFPA

|               |                     |                    |                         |
|---------------|---------------------|--------------------|-------------------------|
| <b>Health</b> | <b>Flammability</b> | <b>Instability</b> | <b>Physical hazards</b> |
| 3             | 1                   | 0                  | N/A                     |

## 6. Accidental release measures

|                                  |                                                                                                                                                   |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal Precautions</b>      | Ensure adequate ventilation. Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. |
| <b>Environmental Precautions</b> | Should not be released into the environment. See Section 12 for additional ecological information.                                                |

**Methods for Containment and Clean Up** Keep in suitable, closed containers for disposal. Soak up with inert absorbent material.

## 7. Handling and storage

|                 |                                                                                                                                                                           |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Handling</b> | Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Use only under a chemical fume hood. Do not breathe vapors or spray mist. Do not ingest. |
| <b>Storage</b>  | Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place.   |

## 8. Exposure controls / personal protection

|                            |                                                                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Exposure Guidelines</b> | This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Personal Protective Equipment

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

### 9. Physical and chemical properties

|                                        |                                      |
|----------------------------------------|--------------------------------------|
| Physical State                         | Liquid                               |
| Appearance                             | Colorless                            |
| Odor                                   | No information available             |
| Odor Threshold                         | No information available             |
| pH                                     | No information available             |
| Melting Point/Range                    | No data available                    |
| Boiling Point/Range                    | 190 - 200 °C / 374 - 392 °F @ 2 mmHg |
| Flash Point                            | No information available             |
| Evaporation Rate                       | No information available             |
| Flammability (solid,gas)               | Not applicable                       |
| Flammability or explosive limits       |                                      |
| Upper                                  | No data available                    |
| Lower                                  | No data available                    |
| Vapor Pressure                         | No information available             |
| Vapor Density                          | No information available             |
| Specific Gravity                       | No information available             |
| Solubility                             | No information available             |
| Partition coefficient; n-octanol/water | No data available                    |
| Autoignition Temperature               | No information available             |
| Decomposition Temperature              | No information available             |
| Viscosity                              | No information available             |
| Molecular Formula                      | C13 H19 Br N2                        |
| Molecular Weight                       | 283.21                               |

### 10. Stability and reactivity

|                                         |                                                                                                           |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------|
| <b>Reactive Hazard</b>                  | None known, based on information available                                                                |
| <b>Stability</b>                        | Stable under normal conditions.                                                                           |
| <b>Conditions to Avoid</b>              | Incompatible products.                                                                                    |
| <b>Incompatible Materials</b>           | Strong oxidizing agents, Strong bases, Strong reducing agents                                             |
| <b>Hazardous Decomposition Products</b> | Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Hydrogen halides, Bromine |
| <b>Hazardous Polymerization</b>         | No information available.                                                                                 |

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

### Acute Toxicity

**Product Information** No acute toxicity information is available for this product

### **Component Information**

**Toxicologically Synergistic Products** No information available

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component                                        | CAS-No      | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|--------------------------------------------------|-------------|------------|------------|------------|------------|------------|
| 1-(4-Bromobenzyl)-4-methylperhydro-1,4-diazepine | 280560-78-3 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Respiratory system

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

Do not empty into drains.

**Persistence and Degradability** Miscible with water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

**DOT**

UN-No UN2735  
 Proper Shipping Name AMINES, LIQUID, CORROSIVE, N.O.S.  
 Proper technical name 1-(4-Bromobenzyl)-4-methylperhydro-1,4-diazepine  
 Hazard Class 8  
 Packing Group III

**TDG**

UN-No UN2735  
 Proper Shipping Name AMINES, LIQUID, CORROSIVE, N.O.S.  
 Hazard Class 8  
 Packing Group III

**IATA**

UN-No UN2735  
 Proper Shipping Name AMINES, LIQUID, CORROSIVE, N.O.S.  
 Hazard Class 8  
 Packing Group III

**IMDG/IMO**

UN-No UN2735  
 Proper Shipping Name AMINES, LIQUID, CORROSIVE, N.O.S.  
 Hazard Class 8  
 Packing Group III

## 15. Regulatory information

**United States of America Inventory**

| Component                                        | CAS-No      | TSCA | TSCA Inventory notification - Active/Inactive | TSCA - EPA Regulatory Flags |
|--------------------------------------------------|-------------|------|-----------------------------------------------|-----------------------------|
| 1-(4-Bromobenzyl)-4-methylperhydro-1,4-diazepine | 280560-78-3 | -    | -                                             | -                           |

**Legend:**

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

**International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

| Component                                        | CAS-No      | DSL | NDSL | EINECS | PICCS | ENCS | AICS | IECSC | KECL |
|--------------------------------------------------|-------------|-----|------|--------|-------|------|------|-------|------|
| 1-(4-Bromobenzyl)-4-methylperhydro-1,4-diazepine | 280560-78-3 | -   | -    | -      | -     | -    | -    | -     | -    |

**U.S. Federal Regulations**

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and Health Administration Not applicable

CERCLA Not applicable

|                                               |                                                            |
|-----------------------------------------------|------------------------------------------------------------|
| <b>California Proposition 65</b>              | This product does not contain any Proposition 65 chemicals |
| <b>U.S. State Right-to-Know Regulations</b>   | Not applicable                                             |
| <b>U.S. Department of Transportation</b>      |                                                            |
| Reportable Quantity (RQ):                     | N                                                          |
| DOT Marine Pollutant                          | N                                                          |
| DOT Severe Marine Pollutant                   | N                                                          |
| <b>U.S. Department of Homeland Security</b>   | This product does not contain any DHS chemicals.           |
| <b><u>Other International Regulations</u></b> |                                                            |
| <b>Mexico - Grade</b>                         | No information available                                   |

## 16. Other information

|                         |                                                                                                                                                                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Prepared By</b>      | Regulatory Affairs<br>Thermo Fisher Scientific<br>Email: EMSDS.RA@thermofisher.com                                                                                                                                                      |
| <b>Revision Date</b>    | 28-Mar-2019                                                                                                                                                                                                                             |
| <b>Print Date</b>       | 28-Mar-2019                                                                                                                                                                                                                             |
| <b>Revision Summary</b> | This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). |

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**