

## Safety Data Sheet

### Section I. Identification of the substance

*Product Name:* 3,6-Bis(4-aminobutyl)-2,5-piperazinedione

*Catalog number:* BP-40618

*Supplier:* Broadpharm, 6625 Top Gun Street, Suite# 103, San Diego, CA 92121, USA.

*Tel:* +1-858-677-6760

*Emergency Phone Number:* +1-858-886-7300

### Section II. Hazards identification

*Classification* Acute toxicity, Oral (Category 4), H302  
Skin irritation (Category 2), H315  
Eye irritation (Category 2A), H319  
Specific target organ toxicity - single exposure (Category 3),  
Respiratory system, H335  
Reproductive toxicity (Category 1A), H360  
Reproductive toxicity (Category 2), H361  
Specific target organ toxicity, repeated exposure (Category 2),  
H373

*Pictograms*



*Single word*

Danger

*Hazards Not Otherwise Classified*

H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H360 May damage fertility or the unborn child.  
H361 Suspected of damaging fertility or the unborn child.  
H373 May cause damage to organs through prolonged or repeated exposure.

*Precautionary Statement(s)*

P201 Obtain special instructions before use  
P202 Do not handle until all safety precautions have been read and understood  
P260 Do not breathe dust  
P264 Wash thoroughly after handling  
P270 Do not eat, drink or smoke when using this product  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection  
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

P302 + P352 + P312 IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/ doctor if you feel unwell.  
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P308+P313 If exposed or concerned: Get medical advice/ attention.  
P360 Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.  
P405 Store locked up  
P501 Dispose of contents/ container to approved disposal facility

### Section III. Composition and information on ingredients.

*Name:* 3,6-Bis(4-aminobutyl)-2,5-piperazinedione

*Formula:* C<sub>12</sub>H<sub>24</sub>N<sub>4</sub>O<sub>2</sub>

*MW:* 256.4

*CAS:* 23409-32-7

### Section IV. First aid measures

- Skin contact:* Immediately wash skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes. If irritation persists, seek medical attention.
- Eye contact:* Immediately wash skin with copious amounts of water for at least 15 minutes. Assure adequate flushing of the eyes by separating the eyelids with fingers. If irritation persists, seek medical attention.
- Inhalation:* Remove to fresh air. In severe cases or if symptoms persist, seek medical attention.
- Ingestion:* Wash out mouth with copious amounts of water for at least 15 minutes. Seek medical attention.

### Section V. Fire fighting measures

In the event of a fire involving this material, alone or in combination with other materials, use dry powder or carbon dioxide extinguishers. Protective clothing and self-contained breathing apparatus should be worn.

### Section VI. Accidental release measures

*Personal precautions.* Wear suitable personal protective equipment which performs satisfactorily and meets local/state/national standards.  
Respiratory precaution: Wear approved mask/respirator  
Hand precaution: Wear suitable gloves/gauntlets  
Skin protection: Wear suitable protective clothing  
Eye protection: Wear suitable eye protection

*Methods for cleaning up:* Mix with sand or similar inert absorbent material, sweep up and keep in a tightly closed container for disposal. See section 12.

*Environmental precautions:* Do not allow material to enter drains or water courses.

**Section VII. Handling and storage**

*Handling:* This product should be handled only by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals, who should take into account the fire, health and chemical hazard data given on this sheet.

*Storage:* Store in closed vessels at -20°C.

**Section VIII. Exposure Controls / PPE**

*Engineering Controls:* Use only in a chemical fume hood.

*Personal protective equipment:* Wear chemical-resistant gloves, safety goggles.

*General hygiene measures:* Wash thoroughly after handling. Wash contaminated clothing before reuse.

**Section IX. Physical and chemical properties**

*Appearance:* Solid

*pH:* No data

*Odor:* No data

*Evaporation rate:* No data

*Boiling point:* No data

*Relative Density:* No data

*Melting point:* No data

*Solubility:* No data

*Flash point:* No data

*Partition coefficient; n-octanol/water:* No data

*Density:* No data

*Auto-ignition temperature:* No data

*Formula:* C<sub>12</sub>H<sub>24</sub>N<sub>4</sub>O<sub>2</sub>

*Decomposition temperature:* No data

*Molecular weight:* 256.4

*Viscosity:* No data

**Section X. Stability and reactivity**

*Conditions to avoid:* Heat, flames and sparks.

*Materials to avoid:* Oxidizing agents.

*Possible hazardous combustion products:* No data available.

**Section XI. Toxicological information**

No data

**Section XII. Ecological information**

No data

**Section XIII. Disposal consideration**

Arrange disposal as special waste, by licensed disposal company, in consultation with local waste disposal authority, in accordance with national and regional regulations.

**Section XIV. Transportation information**

Non-hazardous for air and ground transportation.

**Section XV. Regulatory information**

*Indication of Danger:* No data.

*Risk Statement:* No data.

*Safety Statement:* In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection.

**Section XVI. Other information**

This MSDS is correct to the best of our knowledge and belief at the date of its publication but does not purport to be all inclusive and shall be used only as a guide. BroadPharm shall not be held liable for any loss, injury or damage which may result from its use. This product is for research and development use only.