

Conforms to 93/112/EC and ISO 11014-1

Responsible Name MSDS Administrator

? Section 1. Chemical Product and Company Identification

Product Name Photo-Methionine

Product no. 22615 1901639

Supplier	<i>In USA:</i> Pierce P.O. Box 117 Rockford, IL 61105 USA 815.968.0747 or 1.800.874.3723	<i>In Europe:</i> Perbio Science Industriezone III Industrielaan 27 9320 Erembodegem-Aalst Belgium Tel:+32 53 83 44 04 Fax:+32 53 83 76 38	Manufacturer	Pierce Biotechnology P.O. Box 117 Rockford, IL 61105 USA 815.968.0747 or 1.800.874.3723
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In case of emergency CHEMTREC:
800.424.9300
OUTSIDE US:
703.527.3887

Print date 1/2/2007
Validation date 1/2/2007
MSDS# 7438

Use of the substance/preparation Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific applications.

Chemical name L-2-amino-5,5'-azi-hexanoic acid

Section 2. Composition, Information on Ingredients

Substance/preparation : Substance

No hazardous ingredient according to 29 CFR 1910.1200 Hazard Communication Standard (USA) and Directives 1999/45/EC-2001/59/EC (EU)

Section 3. Hazards identification

United States Review the most current and approved institutional guideline, protocol, standard operating procedure(s) and MSDS(s) for the proper handling of institutional materials/equipment associated with the use of this product.

Emergency overview No specific hazard.

Routes of entry Eye contact. Ingestion.

Potential acute health effects

Eyes No known significant effects or critical hazards.

Skin No known significant effects or critical hazards.

Inhalation No known significant effects or critical hazards.

Ingestion No known significant effects or critical hazards.

Potential chronic health effects

Carcinogenic effects **CARCINOGENIC EFFECTS:** Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

Medical conditions aggravated by overexposure Repeated or prolonged exposure is not known to aggravate medical condition.

Over-exposure signs/symptoms Not available.

Europe

Classification Not classified.

Physical/chemical hazards Not applicable.

Human health hazards Not applicable.

Environmental hazards Not applicable.

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+ Section 4. First aid measures

Effects and symptoms

- Inhalation* Not available.
Ingestion Not available.
Skin contact Not available.
Eye contact Not available.
Aggravating conditions Repeated or prolonged exposure is not known to aggravate medical condition.

First-Aid measures

- Inhalation* If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
Skin contact In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Eye contact In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
Notes to physician Not available.
Protection of first-aiders Not available.
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Section 5. Fire fighting measures

- Flammability of the product* May be combustible at high temperature.
Flash Points Not available.
Fire hazards in presence of various substances Not available.
Fire fighting media and instructions Use an extinguishing agent suitable for surrounding fires.
Protective clothing (fire) Be sure to use an approved/certified respirator or equivalent.
Hazardous thermal decomposition products These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...).
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Section 6. Accidental release measures

- Personal precautions* Safety glasses. Lab coat.
Environmental precautions and clean-up methods Use a shovel to put the material into a convenient waste disposal container.
Small spill and leak Use appropriate tools to put the spilled solid in a convenient waste disposal container.
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Section 7. Handling and storage

- Handling* Wash thoroughly after handling.
Storage Keep container tightly closed. Keep container in a cool, well-ventilated area.
Intended Use Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific applications.
Packaging materials
Suitable / Not suitable Use original container.

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Section 8. Exposure Controls, Personal Protection

Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Exposure Limit Values

<u>Ingredient Name</u>	<u>Occupational Exposure Limits</u>
United States	

Personal Protection

Eyes Safety glasses.

Body Lab coat.

Protective Clothing
(Pictograms)



Section 9. Physical and chemical properties

Physical State Solid.

Color White.

Odor Odorless.

Molecular weight 157 g/mole

Taste Not available.

Molecular formula C6 H11 O2 N3

Dispersion properties Not available.

Solubility Not available.



Section 10. Stability and reactivity

Stability and Reactivity The product is stable.

Conditions to avoid Not available.

Materials to avoid Not available.

Hazardous Decomposition Products Not available.



Section 11. Toxicological information

Toxicity to Animals L-2-amino-5,5'-azi-hexanoic acid
LD50: Not available.
LC50: Not available.

Chronic Effects on Humans Not available.

Other Toxic Effects on Humans No specific information is available in our database regarding the other toxic effects of this material for humans.

Special Remarks on Toxicity to Animals Not available.

Special Remarks on Chronic Effects on Humans Not available.

Special Remarks on Other Toxic Effects on Humans Not available.

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- Carcinogenicity* No known significant effects or critical hazards.
- Mutagenicity* No known significant effects or critical hazards.
- Reproductive toxicity* No known significant effects or critical hazards.
- Over-exposure signs/symptoms
- Inhalation* No known significant effects or critical hazards.
- Ingestion* No known significant effects or critical hazards.
- Skin* No known significant effects or critical hazards.



Section 12. Ecological information

- Mobility* Not available.
- Persistence/degradability* Not available.
- Bioaccumulative potential* Not available.
- Ecotoxicity* Not available.
- Germany water class* VCI WGK: No products were found.

Ecotoxicity data

<u>Ingredient name</u>	<u>Species</u>	<u>Period</u>
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Other ecological information

Persistence/degradability

<u>Ingredient name</u>	<u>BOD₅</u>	<u>COD</u>
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<u>Ingredient name</u>	<u>Aquatic half-life</u>	<u>Photolysis</u>
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Bioaccumulative potential

<u>Ingredient name</u>	<u>LogP_{ow}</u>	<u>BCF</u>
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- Mobility* : Not available.
- Other adverse effects* : No known significant effects or critical hazards.



Section 13. Disposal considerations

- Waste Stream* Not available.
- Methods of disposal* The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
- European waste catalogue (EWC)* Not available.
- Hazardous waste* To present knowledge of the supplier, this product is not regarded as hazardous waste as defined by EU Directive 91/689/EC.
- Denmark – Carcinogenic waste* Not available.
- Denmark - Waste card number* Not available.
- Denmark - Waste group* Not available.
- Sweden - thermoset plastic waste* Not available.
- Sweden - Waste group* Not available.

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Austria - Waste catalogue Not available.

Norway - Waste number Not available.

Norway - Hazardous waste To present knowledge of the supplier, this product is not regarded as hazardous waste as defined by SFT's Directive on special waste.

Switzerland - Waste code Not available.

Section 14. Transport information

Contact the supplier for all information regarding the proper transportation method for this material.

Section 15. Regulatory information

Label Requirements (Europe)

This product is not classified according to the EU regulations.

HCS Classification

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U.S. Federal Regulations TSCA: No products were found.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: No products were found.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean air act (CAA) 112 accidental release prevention: No products were found.

Clean air act (CAA) 112 regulated flammable substances: No products were found.

Clean air act (CAA) 112 regulated toxic substances: No products were found.

State regulations No products were found.

WHMIS (Canada) Not controlled under WHMIS (Canada).

No products were found.

International Regulations

EINECS Not available.

DSCL (EEC) This product is not classified according to the EU regulations.

International Lists No products were found.

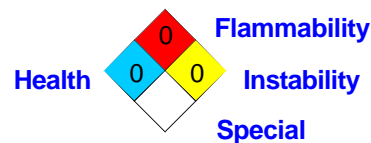
State Regulations No products were found.

Section 16. Other information

Hazardous Material
Information System
(U.S.A.)

Health	1
Fire hazard	0
Reactivity	0
Personal protection	C

National Fire Protection
Association (U.S.A.)



References Not available.

History of Document Changes Any information changes since last document version are marked with a triangle symbol.

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Date of previous issue

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Version

0.02

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.