

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

Responsible Name Pierce Administration

? Section 1. Chemical Product and Company Identification

Product name **Bicinchoninic Acid Solid, Sodium Salt**

Product No. 0023230

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 CALL CHEMTREC:
800.424.9300
OUTSIDE US:
202.483.7616

Print Date 11/12/2002
Validation Date **11/4/2002**
MSDS# 228

Synonyms BCA

Intended Use Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific applications.

Chemical name [2,2'-Biquinoline]-4,4'-dicarboxylic acid, disodium salt

Section 2. Composition, Information on Ingredients

Substance/Preparation : Substance

Ingredient Name	CAS No.	%	EC Number	Symbol	R-Phrases
1) Bicinchoninic Acid Solid, Sodium Salt	979-88-4	98-100	Not available.	--	Not controlled under dsd (Europe).

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. Inhalation. Ingestion.

Potential Acute Health Effects Non-irritant for skin. Non-irritating to the eyes. Non-hazardous in case of ingestion. Non-hazardous in case of inhalation. Non-irritant for lungs.

Carcinogenic Effects Data **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.

Overexposure /Signs/Symptoms Not available.

Europe

Classification Not controlled under dsd (Europe).

Physical/chemical hazards Not applicable.

Human health hazards Not applicable.

Environmental hazards Not applicable.

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See Toxicological Information (section 11)

+ Section 4. First Aid Measures

Notice to Reader Get immediate medical attention.
Effects and symptoms

Inhalation Non-hazardous in case of inhalation. Non-irritant for lungs.
Ingestion Non-hazardous in case of ingestion.
Skin Contact Non-irritant for skin.
Eye Contact Non-irritating to the eyes.
Aggravating conditions Repeated or prolonged exposure is not known to aggravate medical condition.

First-Aid Measures

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.
Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin Contact Wash with soap and water. Get medical attention if irritation develops. Cold water may be used.
Eye Contact Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.
Notes to Physician Not available.
Protection of first-aiders Not available.

🔥 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 SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Protective Clothing (Fire) Be sure to use an approved/certified respirator or equivalent.
Hazardous thermal (de)composition products These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...). Some metallic oxides.

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. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.
Small Spill and Leak Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

◇ Section 7. Handling and Storage

Handling Avoid breathing dust.
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>
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United States

Sweden

1) Bicinchoninic Acid Solid, Sodium Salt	Not available.
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Denmark

1) Bicinchoninic Acid Solid, Sodium Salt	Not available.
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Norway

1) Bicinchoninic Acid Solid, Sodium Salt	Not available.
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France

1) Bicinchoninic Acid Solid, Sodium Salt	Not available.
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Netherlands

1) Bicinchoninic Acid Solid, Sodium Salt	Not available.
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Germany

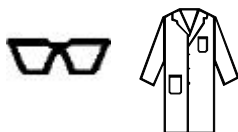
1) Bicinchoninic Acid Solid, Sodium Salt	Not available.
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Personal Protection

Eyes Safety glasses.

Body Lab coat.

Protective Clothing
(Pictograms)



Section 9. Physical and Chemical Properties

Physical State and Appearance Solid. (Solid powder.)

Odor Not available.

Molecular Weight 388.29 g/mole

Taste Not available.

Molecular Formula C₂₀H₁₀O₄N₂Na₂

Color Yellow. (Light.)

Melting/Freezing Point >300°C (572°F)

Dispersion Properties See solubility in water.

Solubility Partially soluble in cold water, hot water.

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Section 10. Stability and Reactivity

- Stability and Reactivity* The product is stable.
- Conditions to avoid* Not available.
- Materials to avoid* Not available.
- Hazardous Polymerization* Will not occur.
- Hazardous Decomposition Products* These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...). Some metallic oxides.



Section 11. Toxicological Information

- Toxicity to Animals* LD50: Not available.
LC50: Not available.
- Chronic Effects on Humans* Not available.
- Other Toxic Effects on Humans* Non-irritating to the eyes. Non-hazardous in case of inhalation. Non-irritant for lungs. Non-sensitizer for lungs.
- 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.



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.



Section 13. Disposal Considerations

- Waste Information* Waste must be disposed of in accordance with federal, state and local environmental control regulations.
- Waste Stream* Not available.

Consult your local or regional authorities.



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 8(b) inventory: Bicinchoninic Acid Solid, Sodium Salt
 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.
 SARA 313 toxic chemical notification and release reporting: 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.

WHMIS (Canada)

Not controlled under WHMIS (Canada).

CEPA DSL: Bicinchoninic Acid Solid, Sodium Salt

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.

California prop. 65: No products were found.

Section 16. Other Information

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

Health	0
Fire Hazard	0
Reactivity	0
Personal Protection	a

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. 

Full text of R-Phrases

Not applicable.

referenced under headings 2 and 3:

Intended Use

Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific applications.

Validated by Pierce Administration on 11/4/2002.

Verified by Pierce Administration.

Date of Previous Issue No Previous Validation

Printed 11/12/2002.

Version 0.01

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.