

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

Responsible Name Company2

## ? Section 1. Chemical Product and Company Identification

**Product name** SHTH, 25 mg.

**Product No.** 0022411

<b>Supplier</b>	<b>In USA:</b> Pierce P.O. Box 117 Rockford, IL 61105 USA 815.968.0747 or 1.800.874.3723	<b>In Europe:</b> Perbio Science Industriezone III Industrielaan 27 9320 Erembodegem-Aalst Belgium Tel:+32 53 83 44 04 Fax:+32 53 83 76 38	<b>Manufacturer</b>	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:  
202.483.7616

**Print Date** 1/27/2005  
**Validation Date** 1/17/2005  
**MSDS#** 7249

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

**Chemical name** Succinimidyl 4-Hydrazidoterephthalate.Hydrochloride

## Section 2. Composition, Information on Ingredients

**Substance/Preparation** : Substance

<u>Ingredient name</u>	<u>CAS number</u>	<u>%</u>	<u>EC number</u>	<u>Classification</u>
SHTH, 25 mg.		98 - 100		Xn; R20/21/22

## 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.  
The complete properties have not been investigated; however, similar compounds are known to be chemically reactive with proteins and other biochemicals and should be treated as potentially hazardous.  
Not applicable.

**Routes of Entry** Not available.

### 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 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

Continued on Next Page

<b>Classification</b>	Xn; R20/21/22
<b>Physical/chemical hazards</b>	Not applicable.
<b>Human health hazards</b>	Harmful by inhalation, in contact with skin and if swallowed.
<b>Environmental hazards</b>	Not applicable.

See Toxicological Information (section 11)

## **Section 4. First Aid Measures**

### Effects and symptoms

<b>Inhalation</b>	Not available.
<b>Ingestion</b>	Not available.
<b>Skin Contact</b>	Not available.
<b>Eye Contact</b>	Not available.
<b>Aggravating conditions</b>	Repeated or prolonged exposure is not known to aggravate medical condition.

### First-Aid Measures

<b>Inhalation</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
<b>Skin Contact</b>	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.
<b>Eye Contact</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
<b>Notes to Physician</b>	Not available.
<b>Protection of first-aiders</b>	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** Use an extinguishing agent suitable for surrounding fires.

Not available.

**Protective Clothing (Fire)** Be sure to use an approved/certified respirator or equivalent.

**Hazardous thermal (de)composition products** These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...), halogenated compounds, hydrogen chloride.

## **Section 6. Accidental Release Measures**

**Personal precautions** Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**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.

## ◆ Section 7. Handling and Storage

**Handling** Do not ingest. Avoid prolonged contact with eyes, skin, and clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing dust. 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.

## 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

**Ingredient Name**

**Occupational Exposure Limits**

**United States**

### Personal Protection

**Eyes** Splash goggles.

**Body** Lab coat.

**Hands** Gloves.

**Respiratory** Respirator is not needed under normal and intended conditions of use, if exposures are kept below established limits.

Protective Clothing  
(Pictograms)



## 🧪 Section 9. Physical and Chemical Properties

**Physical State and Appearance** Solid.

**Color** White.

**Odor** Not available.

**Molecular Weight** 313.5 g/mole

**Taste** Not available.

**Molecular Formula** C12 H11 N3 O5. HCl

**Dispersion Properties** Not available.

**Solubility** Not available.

## 🧪 Section 10. Stability and Reactivity

**Stability and Reactivity** The product is stable.

**Conditions to avoid** moisture

**Materials to avoid** Reactive with moisture.

**Hazardous Decomposition Products** These products are halogenated compounds, hydrogen chloride.

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## Section 11. Toxicological Information

### Toxicity to Animals Succinimidyl 4-Hydrazidoterephthalate.Hydrochloride

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 The complete properties have not been investigated; however, similar compounds are known to be chemically reactive with proteins and other biochemicals and should be treated as potentially hazardous.

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

Ingredient name

Species

Period

### Other ecological information

Persistence/degradability

Ingredient name

BOD<sub>5</sub>

COD

Ingredient name

Aquatic half-life

Photolysis

Bioaccumulative potential

Ingredient name

LogP<sub>ow</sub>

BCF

Mobility : Not available.

Other adverse effects : No known significant effects or critical hazards.

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## 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** The classification of the product may meet the criteria for a hazardous waste

**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.

**Austria - Waste catalogue** Not available.

**Norway - Waste number** Not available.

**Norway - Hazardous waste** The classification of the product may meet the criteria for a hazardous 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)

R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.  
S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.



**Harmful**

### 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.

**Continued on Next Page**

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)* R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.

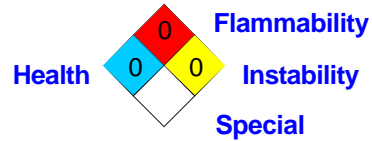
*International Lists* No products were found.

*State Regulations* No products were found.

**Section 16. Other Information**

<b>Hazardous Material Information System (U.S.A.)</b>	<b>Health</b>	1
	<b>Fire hazard</b>	0
	<b>Reactivity</b>	0
	<b>Personal protection</b>	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. ▶

*Full text of R phrases referred to in sections 2 and 3 - Europe* R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.

*Full text of classifications referred to in sections 2 and 3 - Europe* Xn - Harmful

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

**Validated by Company2 on 1/17/2005.**

**Verified by Company2.**

**Date of Previous Issue No Previous Validation**

**Printed 1/27/2005.**

**Version 1**

**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.*