

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

ProductName : Pyruvate Dehydrogenase, from porcine heart

2. HAZARDS IDENTIFICATION

Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS-No.	EC-No.		Classification	Concentration
<b>Glycerol</b> 56-81-5	200-289-5	-	-	50 %
<b>Sucrose</b> 57-50-1	200-334-9	-	-	30 %
<b>p-tertiary-Octylphenoxy polyethyl alcohol</b> 9002-93-1	-	-	Xn, N, R22 - R41 - R51/53	0,3 %
<b>Sodium azide</b> 26628-22-8	247-852-1	-	T+, N, R28 - R32 - R50/53	0,003 %
<b>Tripotassium orthophosphate</b> 7778-53-2	231-907-1	-	Xi, R38 - R41	0,1 %
<b>2-Mercaptoethanol</b> 60-24-2	200-464-6	-	T, N, R23/24/25 - R38 - R41 - R43 - R50/53	0,012 %
<b>Ethylenebis(oxyethylene nitrilo)tetra(acetic acid)</b> 67-42-5	200-651-2	-	-	0,06 %
<b>Edetic acid</b> 60-00-4	200-449-4	-	Xi, R36 - R52/53	0,04 %
<b>Serum albumin</b> 9048-46-8	232-936-2	-	-	0,9 %
<b>Water</b> 7732-18-5	231-791-2	-	-	18,59 %

For the full text of the R-phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

**If inhaled**  
If breathed in, move person into fresh air. If not breathing give artificial respiration

**In case of skin contact**  
Wash off with soap and plenty of water.

**In case of eye contact**  
Flush eyes with water as a precaution.

**If swallowed**  
Never give anything by mouth to an unconscious person. Rinse mouth with water.

5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for fire-fighters**  
Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**  
Avoid breathing vapors, mist or gas.

**Environmental precautions**  
Do not let product enter drains.

**Methods for cleaning up**  
Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

**Handling**  
Normal measures for preventive fire protection.

**Storage**  
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.  
Recommended storage temperature: -20 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Personal protective equipment**

**Respiratory protection**  
Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**  
For prolonged or repeated contact use protective gloves.

**Eye protection**  
Safety glasses

**Hygiene measures**  
General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**

Form	liquid
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**Safety data**

pH	6,8
Melting point	no data available
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Water solubility	no data available

10. STABILITY AND REACTIVITY

**Storage stability**  
Stable under recommended storage conditions.

**Materials to avoid**  
Strong bases, Strong oxidizing agents, Strong acids

11. TOXICOLOGICAL INFORMATION

**Acute toxicity**  
no data available

**Irritation and corrosion**  
no data available

**Sensitisation**  
no data available

**Chronic exposure**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Signs and Symptoms of Exposure**  
Nausea, Dizziness

**Potential Health Effects**

<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Eyes</b>	May cause eye irritation.

**Ingestion**  
**Target Organs**

May be harmful if swallowed.
Kidney,

12. ECOLOGICAL INFORMATION

**Elimination information (persistence and degradability)**  
no data available

**Ecotoxicity effects**  
no data available

**Further information on ecology**  
no data available

13. DISPOSAL CONSIDERATIONS

**Product**  
Observe all federal, state, and local environmental regulations.

**Contaminated packaging**  
Dispose of as unused product.

14. TRANSPORT INFORMATION

**ADR/RID**  
Not dangerous goods

**IMDG**  
Not dangerous goods

**IATA**  
Not dangerous goods

15. REGULATORY INFORMATION

**Labelling according to EC Directives**

Further information:  
The product does not need to be labelled in accordance with EC directives or respective national laws.

16. OTHER INFORMATION

**Text of R-phrases mentioned in Section 3**

R22	Harmful if swallowed.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R28	Very toxic if swallowed.
R32	Contact with acids liberates very toxic gas.
R36	Irritating to eyes.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R43	May cause sensitization by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Further information**

For R&D use only. Not for drug, household or other uses.



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WARRANTY:  
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Lookchem shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.