

# Mascia Brunelli S.p.A.

NCPK8831  
PYRUVATE KINASE

## Scheda di Dati di Sicurezza / Safety Data Sheet

Conforme all'Allegato II del REACH - Regolamento (UE) 2020/878  
According to Annex II to REACH - Regulation 2020/878

**Codice / Code:** NCPK8831

**Nome prodotto / Product name:** PYRUVATE KINASE

**Descrizione d'uso / Intended use:** Determinazione quantitativa cinetica UV della Piruvato chinasi (PK) su siero ed eritrociti / Quantitative kinetic UV determination of Pyruvate kinase (PK) in serum and erythrocytes

**Fornitore / Supplier:** Mascia Brunelli S.p.A.  
Viale Monza 272, 20128 Milano, Italia.  
Tel.: 0039 02 252091  
E-mail: [mktg@masciabrunelli.it](mailto:mktg@masciabrunelli.it)

**Componenti del kit / Kit components:**

1. R1 buffer
2. R2 NADH, LDH
3. R3 ADP
4. R4 CAL
5. R5 DIL



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# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Code: **NCPK8831**  
Product name: **PYRUVATE KINASE\_R1 (Reagent)**

**1.2 Relevant identified uses of the substance or mixture and uses advised against**  
Identified use: **Reagent for in-vitro diagnostic**

### 1.3 Details of the supplier of the safety data sheet

Name: **Mascia Brunelli S.p.A.**  
Full address: **Viale Monza, 272**  
District and Country: **20128 Milano (Milano)**  
**Italia**

**Tel. 0039 02 252091**

e-mail address of the competent person

responsible for the Safety Data Sheet: **[mktg@masciabrunelli.it](mailto:mktg@masciabrunelli.it)**

### 1.4 Emergency telephone number

For urgent inquiries refer to: **NHS111 in England: 111**  
**NHS24 in Scotland: 111**  
**NHS Direct in Wales: 111 or 0845 4647**  
**In an emergency, if the patient has collapsed or is not breathing properly, call 999**

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements).

Hazard classification and indication: -

### 2.2 Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms: --

Signal words: --

Hazard statements: --

Precautionary statements: --

### 2.3 Other hazards

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII.

No information on other hazards.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Irrilevant



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### 3.2 Mixtures

No substance to signal.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Inhalation: air the area. Immediately move the patient from the contaminated area and keep him at rest in a well-ventilated area. If you feel unwell seek medical advice.

Direct skin contact (of the pure product): wash thoroughly with soap and water.

Direct eye contact (of pure product): wash immediately with plenty of water for at least 10 minutes.

Ingestion: not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine.

### 4.2. Most important symptoms and effects, both acute and delayed

Information not available

### 4.3. Indication of any immediate medical attention and special treatment needed

Information not available

## SECTION 5: Fire fighting measures

### 5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: Foam. Dry powder. Carbon dioxide. Water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

Water jets. Use water jets only to cool container surfaces exposed to fire.

### 5.2. Special hazards arising from the substance or mixture

Information not available

### 5.3. Advice for firefighters

Use respiratory protection. Safety helmet and full protective clothing. Water spray can be used to protect people engaged in extinguishing. It is also advisable to use self-contained breathing apparatus, especially, if working in enclosed and poorly ventilated places and in any case if halogenated extinguishing agents (fluobrene, solkan 123, NAF, etc.) are used. Cool containers with jets of water.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel: leave the area surrounding the spill or release. Do not smoke. Wear gloves and protective clothing.

6.1.2 For emergency responders: Wear gloves and protective clothing. Eliminate all unguarded flames and possible sources of ignition. Do not smoke. Provide adequate ventilation. Evacuate the danger area and, in case, consult an expert.

### 6.2. Environmental precautions

Contain spills with earth or sand. If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the authorities. Dispose of the residue in accordance with applicable regulations.

### 6.3. Methods and material for containment and cleaning up

6.3.1 For containment. Collect the product for reuse, if possible, or for disposal. If possible, absorb it with inert material. Prevent it from entering the sewage system.



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6.3.2 For cleanup. After collection, wash the affected area and materials with water.

6.3.3 Other information: None in particular.

**6.4. Reference to other sections**

Any information on personal protection and disposal is given in sections 8 and 13.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Avoid contact and inhalation of vapors.  
Do not eat or drink while working.  
See also section 8 below.

**7.2. Conditions for safe storage, including any incompatibilities**

Keep in original container closed tightly. Do not store in open or unlabeled containers. Keep containers upright and safe by avoiding the possibility of falls or collisions. Store in a cool place, away from any source of heat and direct exposure to sunlight.

**7.3. Specific end use(s)**

Professional uses:  
Handle with care.  
Store in ventilated place and away from heat sources.  
Keep container tightly closed.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

No data available.

**8.2. Exposure controls**

Appropriate engineering controls:  
Professional uses:  
No specific controls provided

Individual protective measures:

**HAND PROTECTION**  
None required for normal use.

**SKIN PROTECTION**  
Wear normal work clothing.

**EYE PROTECTION**  
None required for normal use.

**RESPIRATORY PROTECTION**  
None required for normal use.

**THERMAL HAZARDS**  
No hazard to report

**ENVIRONMENTAL EXPOSURE CONTROLS**  
Use according to good working practices, avoiding spillage into the environment.

**NCPK8831 – PYRUVATE KINASE****SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>Properties</b>	<b>Value</b>	<b>Information</b>
Appearance	liquid	
Colour	Not determined	
Odour	Not determined	
Melting point / freezing point	Not determined	
Initial boiling point	Not determined	
Flammability	Irrilevant	
Lower explosive limit	Irrilevant	
Upper explosive limit	Irrilevant	
Flash point	Irrilevant	
Auto-ignition temperature	Irrilevant	
pH	In water	
Kinematic viscosity	Irrilevant	
Solubility	Not determined	
Partition coefficient: n-octanol/water	Not determined	
Vapour pressure	Not determined	
Density and/or relative density	Not determined	
Relative vapour density	Not determined	
Particle characteristics	Not determined	

**9.2. Other information**

## 9.2.1. Information with regard to physical hazard classes

Information not available

## 9.2.2. Other safety characteristics

Information not available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

**10.2. Chemical stability**

No hazardous reaction when handled and stored according to provisions.

**10.3. Possibility of hazardous reactions**

No hazardous reactions are foreseeable in normal conditions of use and storage.

**10.4. Conditions to avoid**

None in particular.

**10.5. Incompatible materials**

None in particular.

**NCPK8831 – PYRUVATE KINASE****10.6. Hazardous decomposition products**

Does not decompose when used for its intended uses.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

ATE(mix) oral = ∞  
ATE(mix) dermal = ∞  
ATE(mix) inhal = ∞

- (a) acute toxicity: based on available data, the classification criteria are not met
- (b) skin corrosion/dermal irritation: based on available data, the classification criteria are not met
- (c) severe ocular damage/eye irritation: based on available data the classification criteria are not met
- (d) respiratory or skin sensitization: based on available data the classification criteria are not met
- (e) germ cell mutagenicity: based on available data the classification criteria are not met
- (f) carcinogenicity: based on available data the classification criteria are not met
- (g) reproductive toxicity: based on available data the classification criteria are not met
- (h) specific target organ toxicity (STOT) single exposure: based on available data the classification criteria are not met
- (i) specific target organ toxicity (STOT) repeated exposure: based on available data the classification criteria are not met
- (j) aspiration hazard: based on available data, the classification criteria are not met.

**Health hazards:**

Contact with eyes: accidental contact with the eyes may cause irritation.

Contact with skin: the product is not an irritant. Repeated and prolonged direct contact can degrease and irritate the skin and cause dermatitis in some cases.

Ingestion: ingestion may cause product mucosal irritation of the throat and digestive system resulting in abnormal digestive symptoms and intestinal disorders.

Inhalation: prolonged Exposure to vapors or mists of product may cause irritation to the respiratory tract.

**11.2. Information on other hazards****11.2.1. Endocrine disrupting properties**

Based on available data, there are no substances with endocrine-disrupting properties.

**11.2.2. Other information**

No information on other hazards.

**SECTION 12: Ecological information****12.1. Toxicity**

Use according to good working practices, avoiding dispersing the product into the environment.

**12.2. Persistence and degradability**

Information not available

**12.3. Bioaccumulative potential**

Information not available

**12.4. Mobility in soil**

Information not available

**12.5. Results of PBT and vPvB assessment**

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII.



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#### 12.6. Endocrine disrupting properties

Information not available

#### 12.7. Other adverse effects

No adverse effects observed

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with current regulations. Any product residues should be disposed of according to current regulations by contacting authorized companies. Recover if possible. Operate according to current local or national regulations.

### SECTION 14: Transport information

#### 14.1. UN number or ID number

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

#### 14.2. UN proper shipping name

Not applicable

#### 14.3. Transport hazard class(es)

Not applicable

#### 14.4. Packing group

Not applicable

#### 14.5. Environmental hazards

Not applicable

#### 14.6. Special precautions for user

No data available

#### 14.7. Maritime transport in bulk according to IMO instruments

There is no provision for bulk transport

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

D.Lgs 3/2/1997 No. 52 (Classification, packaging and labeling of dangerous substances), D.Lgs 14/3/2003 No. 65 (Classification, packaging and labeling of dangerous preparations), D.Lgs 81/08 (Consolidated text on the protection of health and safety in the workplace), D. M. 03/04/2007 (Implementation of Directive No. 2006/8/EC), Regulation (EC) No. 1907/2006 (REACH), Regulation (EC) No. 1272/2008 (CLP), Regulation (EC) No. 790/2009, Legislative Decree 105/2015 (Seveso Ter Directive), Regulation (EU) 2019/1021, Regulation (EU) 2020/878. Substances on Candidate List (art.59 REACH).

Based on available data, there are no SVHC substances present.

#### 15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.



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**SECTION 16: Other information**

Classification and procedure used to derive it under Regulation (EC)1272/2008 [CLP] in relation to mixtures:

No hazard to report.

Classification procedure: Calculation method.

**GENERAL BIBLIOGRAPHY**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EC) 758/2013 of the European Parliament
  4. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
  5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
  6. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  7. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  8. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  9. Regulation (EU) 517/2013 of Council
  10. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  11. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  12. Regulation (EU) 2015/491 of the European Parliament
  13. Regulation (EU) No. 1297/2014 of the Commission
  14. Regulation (EC) 528/2012 of the European Parliament and subsequent updates
  15. Regulation (EC) 648/2004 of the European Parliament and subsequent updates
- The Merck Index.
  - Handling Chemical Safety
  - Niosh – Registry of Toxic Effects of Chemical Substances
  - INRS - Fiche Toxicologique
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition

**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

This SDS replaces and cancels all previous ones.





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# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Code: **NCPK8831**  
Product name: **PYRUVATE KINASE\_R2 (Reagent)**

**1.2 Relevant identified uses of the substance or mixture and uses advised against**  
Identified use: **Reagent for in-vitro diagnostic**

### 1.3 Details of the supplier of the safety data sheet

Name: **Mascia Brunelli S.p.A.**  
Full address: **Viale Monza, 272**  
District and Country: **20128 Milano (Milano)**  
**Italia**  
  
Tel. **0039 02 252091**

e-mail address of the competent person

responsible for the Safety Data Sheet: **[mktg@masciabrunelli.it](mailto:mktg@masciabrunelli.it)**

### 1.4 Emergency telephone number

For urgent inquiries refer to: **NHS111 in England: 111**  
**NHS24 in Scotland: 111**  
**NHS Direct in Wales: 111 or 0845 4647**  
**In an emergency, if the patient has collapsed or is not breathing properly, call 999**

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements).

Hazard classification and indication: -

### 2.2 Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms: --

Signal words: --

Hazard statements: --

Precautionary statements: --

### 2.3 Other hazards

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII.

No information on other hazards.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Irrilevant



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### 3.2 Mixtures

No substance to signal.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Inhalation: air the area. Immediately move the patient from the contaminated area and keep him at rest in a well-ventilated area. If you feel unwell seek medical advice.

Direct skin contact (of the pure product): wash thoroughly with soap and water.

Direct eye contact (of pure product): wash immediately with plenty of water for at least 10 minutes.

Ingestion: not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine.

### 4.2. Most important symptoms and effects, both acute and delayed

Information not available

### 4.3. Indication of any immediate medical attention and special treatment needed

Information not available

## SECTION 5: Fire fighting measures

### 5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: Foam. Dry powder. Carbon dioxide. Water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

Water jets. Use water jets only to cool container surfaces exposed to fire.

### 5.2. Special hazards arising from the substance or mixture

Information not available

### 5.3. Advice for firefighters

Use respiratory protection. Safety helmet and full protective clothing. Water spray can be used to protect people engaged in extinguishing. It is also advisable to use self-contained breathing apparatus, especially, if working in enclosed and poorly ventilated places and in any case if halogenated extinguishing agents (fluobrene, solkan 123, NAF, etc.) are used. Cool containers with jets of water.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel: leave the area surrounding the spill or release. Do not smoke. Wear gloves and protective clothing.

6.1.2 For emergency responders: Wear gloves and protective clothing. Eliminate all unguarded flames and possible sources of ignition. Do not smoke. Provide adequate ventilation. Evacuate the danger area and, in case, consult an expert.

### 6.2. Environmental precautions

Contain spills. If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the authorities. Dispose of the residue in accordance with applicable regulations.

### 6.3. Methods and material for containment and cleaning up

6.3.1 For containment. Collect the product for reuse, if possible, or for disposal.



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6.3.2 For cleanup. After collection, wash the affected area and materials with water.

6.3.3 Other information: None in particular.

#### **6.4. Reference to other sections**

Any information on personal protection and disposal is given in sections 8 and 13.

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

Do not eat or drink while working.  
See also section 8 below.

#### **7.2. Conditions for safe storage, including any incompatibilities**

Keep in original container closed tightly. Do not store in open or unlabeled containers. Keep containers upright and safe by avoiding the possibility of falls or collisions. Store in a cool place, away from any source of heat and direct exposure to sunlight.

#### **7.3. Specific end use(s)**

Professional uses:  
Handle with care.  
Store in ventilated place and away from heat sources.  
Keep container tightly closed.

### **SECTION 8: Exposure controls/personal protection**

#### **8.1. Control parameters**

No data available.

#### **8.2. Exposure controls**

Appropriate engineering controls:  
Professional uses:  
No specific controls provided

Individual protective measures:

**HAND PROTECTION**  
None required for normal use.

**SKIN PROTECTION**  
Wear normal work clothing.

**EYE PROTECTION**  
None required for normal use.

**RESPIRATORY PROTECTION**  
None required for normal use.

**THERMAL HAZARDS**  
No hazard to report

**ENVIRONMENTAL EXPOSURE CONTROLS**  
Use according to good working practices, avoiding spillage into the environment.

**NCPK8831 – PYRUVATE KINASE****SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>Properties</b>	<b>Value</b>	<b>Information</b>
Appearance	lyophile	
Colour	Clear, colourless after dissolution	
Odour	Not determined	
Melting point / freezing point	Not determined	
Initial boiling point	Not determined	
Flammability	Not determined	
Lower explosive limit	Not determined	
Upper explosive limit	Not determined	
Flash point	Not determined	
Auto-ignition temperature	Not determined	
pH	Not determined	
Kinematic viscosity	Not determined	
Solubility	Not determined	
Partition coefficient: n-octanol/water	Not determined	
Vapour pressure	Not determined	
Density and/or relative density	Not determined	
Relative vapour density	Not determined	
Particle characteristics	Not determined	

**9.2. Other information**

## 9.2.1. Information with regard to physical hazard classes

Information not available

## 9.2.2. Other safety characteristics

Information not available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

**10.2. Chemical stability**

No hazardous reaction when handled and stored according to provisions.

**10.3. Possibility of hazardous reactions**

No hazardous reactions are foreseeable in normal conditions of use and storage.

**10.4. Conditions to avoid**

None in particular.

**10.5. Incompatible materials**

None in particular.

**NCPK8831 – PYRUVATE KINASE****10.6. Hazardous decomposition products**

Does not decompose when used for its intended uses.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

ATE(mix) oral = ∞  
ATE(mix) dermal = ∞  
ATE(mix) inhal = ∞

- (a) acute toxicity: based on available data, the classification criteria are not met
- (b) skin corrosion/dermal irritation: based on available data, the classification criteria are not met
- (c) severe ocular damage/eye irritation: based on available data the classification criteria are not met
- (d) respiratory or skin sensitization: based on available data the classification criteria are not met
- (e) germ cell mutagenicity: based on available data the classification criteria are not met
- (f) carcinogenicity: based on available data the classification criteria are not met
- (g) reproductive toxicity: based on available data the classification criteria are not met
- (h) specific target organ toxicity (STOT) single exposure: based on available data the classification criteria are not met
- (i) specific target organ toxicity (STOT) repeated exposure: based on available data the classification criteria are not met
- (j) aspiration hazard: based on available data, the classification criteria are not met.

**11.2. Information on other hazards****11.2.1. Endocrine disrupting properties**

Based on available data, there are no substances with endocrine-disrupting properties.

**11.2.2. Other information**

No information on other hazards.

**SECTION 12: Ecological information****12.1. Toxicity**

Use according to good working practices, avoiding dispersing the product into the environment.

**12.2. Persistence and degradability**

Information not available

**12.3. Bioaccumulative potential**

Information not available

**12.4. Mobility in soil**

Information not available

**12.5. Results of PBT and vPvB assessment**

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII.

**12.6. Endocrine disrupting properties**

Information not available

**12.7. Other adverse effects**

No adverse effects observed



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**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

Do not reuse empty containers. Dispose of them in accordance with current regulations. Any product residues should be disposed of according to current regulations by contacting authorized companies. Recover if possible. Operate according to current local or national regulations.

**SECTION 14: Transport information**

**14.1. UN number or ID number**

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

**14.2. UN proper shipping name**

Not applicable

**14.3. Transport hazard class(es)**

Not applicable

**14.4. Packing group**

Not applicable

**14.5. Environmental hazards**

Not applicable

**14.6. Special precautions for user**

No data available

**14.7. Maritime transport in bulk according to IMO instruments**

There is no provision for bulk transport

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

D.Lgs 3/2/1997 No. 52 (Classification, packaging and labeling of dangerous substances), D.Lgs 14/3/2003 No. 65 (Classification, packaging and labeling of dangerous preparations), D.Lgs 81/08 (Consolidated text on the protection of health and safety in the workplace), D. M. 03/04/2007 (Implementation of Directive No. 2006/8/EC), Regulation (EC) No. 1907/2006 (REACH), Regulation (EC) No. 1272/2008 (CLP), Regulation (EC) No. 790/2009, Legislative Decree 105/2015 (Seveso Ter Directive), Regulation (EU) 2019/1021, Regulation (EU) 2020/878. Substances on Candidate List (art.59 REACH).  
Based on available data, there are no SVHC substances present.

**15.2. Chemical safety assessment**

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

**SECTION 16: Other information**

Classification and procedure used to derive it under Regulation (EC)1272/2008 [CLP] in relation to mixtures:

No hazard to report.

Classification procedure: Calculation method.

GENERAL BIBLIOGRAPHY



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  4. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
  5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
  6. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  7. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  8. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  9. Regulation (EU) 517/2013 of Council
  10. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  11. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  12. Regulation (EU) 2015/491 of the European Parliament
  13. Regulation (EU) No. 1297/2014 of the Commission
  14. Regulation (EC) 528/2012 of the European Parliament and subsequent updates
  15. Regulation (EC) 648/2004 of the European Parliament and subsequent updates
- The Merck Index.
  - Handling Chemical Safety
  - Niosh – Registry of Toxic Effects of Chemical Substances
  - INRS - Fiche Toxicologique
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition

**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

This SDS replaces and cancels all previous ones.



**Mascia Brunelli S.p.A.**

Revision nr. 1

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**NCPK8831 – PYRUVATE KINASE**

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# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Code: **NCPK8831**  
Product name: **PYRUVATE KINASE\_R3 (reagent)**

**1.2 Relevant identified uses of the substance or mixture and uses advised against**  
Identified use: **Reagent for in-vitro diagnostic**

### 1.3 Details of the supplier of the safety data sheet

Name: **Mascia Brunelli S.p.A.**  
Full address: **Viale Monza, 272**  
District and Country: **20128 Milano (Milano)**  
**Italia**

**Tel. 0039 02 252091**

e-mail address of the competent person

responsible for the Safety Data Sheet: **[mktg@masciabrunelli.it](mailto:mktg@masciabrunelli.it)**

### 1.4 Emergency telephone number

For urgent inquiries refer to: **NHS111 in England: 111**  
**NHS24 in Scotland: 111**  
**NHS Direct in Wales: 111 or 0845 4647**  
**In an emergency, if the patient has collapsed or is not breathing properly, call 999**

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements).

Hazard classification and indication: -

### 2.2 Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms: --

Signal words: --

Hazard statements: --

Precautionary statements: --

### 2.3 Other hazards

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII.

No information on other hazards.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Irrilevant



**NCPK8831 – PYRUVATE KINASE****3.2 Mixtures**

Refer to paragraph 16 for full text of hazard statements.

<b>Identification</b>	<b>x = Conc. %</b>	<b>Classification 1272/2008 (CLP)</b>
<b>ADP-Li<sub>3</sub></b>		
CAS 31008-64-7	5% ≤ x < 10%	Skin Corr. , H315
EC: --		Eye Irrit.2, H319
REACH – No.: --		STOT SE 2, H335
		Limits:
INDEX: --		ATE oral > 10,8 mg/kg

**SECTION 4: First aid measures****4.1. Description of first aid measures**

Inhalation: air the area. Immediately move the patient from the contaminated area and keep him at rest in a well-ventilated area. If you feel unwell seek medical advice.

Direct skin contact (of the pure product): wash thoroughly with soap and flushing water.

Direct eye contact (of pure product): wash immediately with plenty of water for at least 10 minutes.

Ingestion: not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine.

**4.2. Most important symptoms and effects, both acute and delayed**

Information not available

**4.3. Indication of any immediate medical attention and special treatment needed**

Information not available

**SECTION 5: Fire fighting measures****5.1. Extinguishing media****SUITABLE EXTINGUISHING EQUIPMENT**

The extinguishing equipment should be of the conventional kind: Foam. Dry powder. Carbon dioxide. Water spray.

**UNSUITABLE EXTINGUISHING EQUIPMENT**

Water jets. Use water jets only to cool container surfaces exposed to fire.

**5.2. Special hazards arising from the substance or mixture**

Information not available

**5.3. Advice for firefighters**

Use respiratory protection. Safety helmet and full protective clothing. Water spray can be used to protect people engaged in extinguishing. It is also advisable to use self-contained breathing apparatus, especially, if working in enclosed and poorly ventilated places and in any case if halogenated extinguishing agents (fluobrene, solkan 123, NAF, etc.) are used. Cool containers with jets of water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

6.1.1 For non-emergency personnel: leave the area surrounding the spill or release. Do not smoke. Wear gloves and protective clothing.

6.1.2 For emergency responders: Wear gloves and protective clothing. Eliminate all unguarded flames and possible sources of ignition. Do not smoke. Provide adequate ventilation. Evacuate the danger area and, in case, consult an expert.



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**6.2. Environmental precautions**

Contain spills. If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the authorities. Dispose of the residue in accordance with applicable regulations.

**6.3. Methods and material for containment and cleaning up**

6.3.1 For containment. Collect the product for reuse, if possible, or for disposal.

6.3.2 For cleanup. After collection, wash the affected area and materials with water.

6.3.3 Other information: None in particular.

**6.4. Reference to other sections**

Any information on personal protection and disposal is given in sections 8 and 13.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Do not eat or drink while working.  
See also section 8 below.

**7.2. Conditions for safe storage, including any incompatibilities**

Keep in original container closed tightly. Do not store in open or unlabeled containers. Keep containers upright and safe by avoiding the possibility of falls or collisions. Store in a cool place, away from any source of heat and direct exposure to sunlight.

**7.3. Specific end use(s)**

Professional uses:  
Handle with care.  
Store in ventilated place and away from heat sources.  
Keep container tightly closed.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

No data available

**8.2. Exposure controls**

Appropriate engineering controls:  
Professional uses:  
No specific controls provided

Individual protective measures:

**HAND PROTECTION**  
None required for normal use.

**SKIN PROTECTION**  
Wear normal work clothing.

**EYE PROTECTION**  
None required for normal use.

**RESPIRATORY PROTECTION**  
None required for normal use.

**NCPK8831 – PYRUVATE KINASE****THERMAL HAZARDS**

No hazard to report

**ENVIRONMENTAL EXPOSURE CONTROLS**

Use according to good working practices, avoiding spillage into the environment.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Properties	Value	Information
Appearance	lyophile	
Colour	Clear, colourless after disoslution	
Odour	Not determined	
Melting point / freezing point	Not determined	
Initial boiling point	Not determined	
Flammability	Not determined	
Lower explosive limit	Not determined	
Upper explosive limit	Not determined	
Flash point	Not determined	
Auto-ignition temperature	Not determined	
pH	Not determined	
Kinematic viscosity	Not determined	
Solubility	Not determined	
Partition coefficient: n-octanol/water	Not determined	
Vapour pressure	Not determined	
Density and/or relative density	Not determined	
Relative vapour density	Not determined	
Particle characteristics	Not determined	

**9.2. Other information**

## 9.2.1. Information with regard to physical hazard classes

Information not available

## 9.2.2. Other safety characteristics

Information not available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

**10.2. Chemical stability**

No hazardous reaction when handled and stored according to provisions.

**10.3. Possibility of hazardous reactions**

No hazardous reactions are foreseeable in normal conditions of use and storage.



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**10.4. Conditions to avoid**

None in particular.

**10.5. Incompatible materials**

None in particular.

**10.6. Hazardous decomposition products**

Does not decompose when used for its intended uses.

**SECTION 11: Toxicological information**

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

ATE(mix) oral = ∞  
ATE(mix) dermal = ∞  
ATE(mix) inhal = ∞

- (a) acute toxicity: based on available data, the classification criteria are not met
- (b) skin corrosion/dermal irritation: based on available data, the classification criteria are not met
- (c) severe ocular damage/eye irritation: based on available data the classification criteria are not met
- (d) respiratory or skin sensitization: based on available data the classification criteria are not met
- (e) germ cell mutagenicity: based on available data the classification criteria are not met
- (f) carcinogenicity: based on available data the classification criteria are not met
- (g) reproductive toxicity: based on available data the classification criteria are not met
- (h) specific target organ toxicity (STOT) single exposure: based on available data the classification criteria are not met
- (i) specific target organ toxicity (STOT) repeated exposure: based on available data the classification criteria are not met
- (j) aspiration hazard: based on available data, the classification criteria are not met.

Related to contained substances:

ADP-Li<sub>3</sub>:  
No effect known  
LD50 Oral (rat) (mg/kg body weight) > 10,75

**11.2. Information on other hazards**

**11.2.1. Endocrine disrupting properties**

Based on available data, there are no substances with endocrine-disrupting properties.

**11.2.2. Other information**

No information on other hazards.

**SECTION 12: Ecological information**

**12.1. Toxicity**

Use according to good working practices, avoiding dispersion of the product into the environment.

**12.2. Persistence and degradability**

Information not available

**12.3. Bioaccumulative potential**

Information not available

**12.4. Mobility in soil**

**NCPK8831 – PYRUVATE KINASE**

Information not available

**12.5. Results of PBT and vPvB assessment**

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII.

**12.6. Endocrine disrupting properties**

Information not available

**12.7. Other adverse effects**

No adverse effects observed

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

Do not reuse empty containers. Dispose of them in accordance with current regulations. Any product residues should be disposed of according to current regulations by contacting authorized companies. Recover if possible. Operate according to current local or national regulations.

**SECTION 14: Transport information****14.1. UN number or ID number**

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

**14.2. UN proper shipping name**

Not applicable

**14.3. Transport hazard class(es)**

Not applicable

**14.4. Packing group**

Not applicable

**14.5. Environmental hazards**

Not applicable

**14.6. Special precautions for user**

No data available

**14.7. Maritime transport in bulk according to IMO instruments**

There is no provision for bulk transport

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

D.Lgs 3/2/1997 No. 52 (Classification, packaging and labeling of dangerous substances), D.Lgs 14/3/2003 No. 65 (Classification, packaging and labeling of dangerous preparations), D.Lgs 81/08 (Consolidated text on the protection of health and safety in the workplace), D. M. 03/04/2007 (Implementation of Directive No. 2006/8/EC), Regulation (EC) No. 1907/2006 (REACH), Regulation (EC) No. 1272/2008 (CLP), Regulation (EC) No.



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790/2009, Legislative Decree 105/2015 (Seveso Ter Directive), Regulation (EU) 2019/1021, Regulation (EU) 2020/878. Substances on Candidate List (art.59 REACH).

Based on available data, there are no SVHC substances present.

**15.2. Chemical safety assessment**

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

**SECTION 16: Other information**

Description of the hazard statements exposed to point 3

H315 = Causes skin irritation.

H319 = Causes serious eye irritation.

H335 = May cause respiratory tract irritation.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008

No hazard to report. Classification procedure: Calculation method

**GENERAL BIBLIOGRAPHY**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EC) 758/2013 of the European Parliament
  4. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
  5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
  6. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  7. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  8. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  9. Regulation (EU) 517/2013 of Council
  10. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  11. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  12. Regulation (EU) 2015/491 of the European Parliament
  13. Regulation (EU) No. 1297/2014 of the Commission
  14. Regulation (EC) 528/2012 of the European Parliament and subsequent updates
  15. Regulation (EC) 648/2004 of the European Parliament and subsequent updates
- The Merck Index.
  - Handling Chemical Safety
  - Niosh – Registry of Toxic Effects of Chemical Substances
  - INRS - Fiche Toxicologique
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition

**Note for users:**

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The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

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# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Code: **NCPK8831**  
Product name: **PYRUVATE KINASE\_R4 (Reagent)**

**1.2 Relevant identified uses of the substance or mixture and uses advised against**  
Identified use: **Reagent for in-vitro diagnostic**

### 1.3 Details of the supplier of the safety data sheet

Name: **Mascia Brunelli S.p.A.**  
Full address: **Viale Monza, 272**  
District and Country: **20128 Milano (Milano)**  
**Italia**  
  
Tel. **0039 02 252091**

e-mail address of the competent person

responsible for the Safety Data Sheet: **[mktg@masciabrunelli.it](mailto:mktg@masciabrunelli.it)**

### 1.4 Emergency telephone number

For urgent inquiries refer to: **NHS111 in England: 111**  
**NHS24 in Scotland: 111**  
**NHS Direct in Wales: 111 or 0845 4647**  
**In an emergency, if the patient has collapsed or is not breathing properly, call 999**

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements).

Hazard classification and indication: -

### 2.2 Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms: --

Signal words: --

Hazard statements: --

Precautionary statements: --

### 2.3 Other hazards

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII.

No information on other hazards.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Irrilevant



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**3.2 Mixtures**

No substance to signal.

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

Inhalation: air the area. Immediately move the patient from the contaminated area and keep him at rest in a well-ventilated area. If you feel unwell seek medical advice.

Direct skin contact (of the pure product): wash thoroughly with soap and water.

Direct eye contact (of pure product): wash immediately with plenty of water for at least 10 minutes.

Ingestion: not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine.

**4.2. Most important symptoms and effects, both acute and delayed**

Information not available

**4.3. Indication of any immediate medical attention and special treatment needed**

Information not available

**SECTION 5: Fire fighting measures**

**5.1. Extinguishing media**

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: Foam. Dry powder. Carbon dioxide. Water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

Water jets. Use water jets only to cool container surfaces exposed to fire.

**5.2. Special hazards arising from the substance or mixture**

Information not available

**5.3. Advice for firefighters**

Use respiratory protection. Safety helmet and full protective clothing. Water spray can be used to protect people engaged in extinguishing. It is also advisable to use self-contained breathing apparatus, especially, if working in enclosed and poorly ventilated places and in any case if halogenated extinguishing agents (fluobrene, solkan 123, NAF, etc.) are used. Cool containers with jets of water.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

6.1.1 For non-emergency personnel: leave the area surrounding the spill or release. Do not smoke. Wear gloves and protective clothing.

6.1.2 For emergency responders: Wear gloves and protective clothing. Eliminate all unguarded flames and possible sources of ignition. Do not smoke. Provide adequate ventilation. Evacuate the danger area and, in case, consult an expert.

**6.2. Environmental precautions**

Contain spills. If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the authorities. Dispose of the residue in accordance with applicable regulations.

**6.3. Methods and material for containment and cleaning up**

6.3.1 For containment. Collect the product for reuse, if possible, or for disposal.





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6.3.2 For cleanup. After collection, wash the affected area and materials with water.

6.3.3 Other information: None in particular.

#### **6.4. Reference to other sections**

Any information on personal protection and disposal is given in sections 8 and 13.

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

Do not eat or drink while working.  
See also section 8 below.

#### **7.2. Conditions for safe storage, including any incompatibilities**

Keep in original container closed tightly. Do not store in open or unlabeled containers. Keep containers upright and safe by avoiding the possibility of falls or collisions. Store in a cool place, away from any source of heat and direct exposure to sunlight.

#### **7.3. Specific end use(s)**

Professional uses:  
Handle with care.  
Store in ventilated place and away from heat sources.  
Keep container tightly closed.

### **SECTION 8: Exposure controls/personal protection**

#### **8.1. Control parameters**

No data available.

#### **8.2. Exposure controls**

Appropriate engineering controls:  
Professional uses:  
No specific controls provided

Individual protective measures:

**HAND PROTECTION**  
None required for normal use.

**SKIN PROTECTION**  
Wear normal work clothing.

**EYE PROTECTION**  
None required for normal use.

**RESPIRATORY PROTECTION**  
None required for normal use.

**THERMAL HAZARDS**  
No hazard to report

**ENVIRONMENTAL EXPOSURE CONTROLS**  
Use according to good working practices, avoiding spillage into the environment.

**NCPK8831 – PYRUVATE KINASE****SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>Properties</b>	<b>Value</b>	<b>Information</b>
Appearance	lyophile	
Colour	yellow	
Odour	Not determined	
Melting point / freezing point	Not determined	
Initial boiling point	Not determined	
Flammability	Not determined	
Lower explosive limit	Not determined	
Upper explosive limit	Not determined	
Flash point	Not determined	
Auto-ignition temperature	Not determined	
pH	Not determined	
Kinematic viscosity	Not determined	
Solubility	Not determined	
Partition coefficient: n-octanol/water	Not determined	
Vapour pressure	Not determined	
Density and/or relative density	Not determined	
Relative vapour density	Not determined	
Particle characteristics	Not determined	

**9.2. Other information**

## 9.2.1. Information with regard to physical hazard classes

Information not available

## 9.2.2. Other safety characteristics

Information not available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

**10.2. Chemical stability**

No hazardous reaction when handled and stored according to provisions.

**10.3. Possibility of hazardous reactions**

No hazardous reactions are foreseeable in normal conditions of use and storage.

**10.4. Conditions to avoid**

None in particular.

**10.5. Incompatible materials**

None in particular.

**NCPK8831 – PYRUVATE KINASE****10.6. Hazardous decomposition products**

Does not decompose when used for its intended uses.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

ATE(mix) oral = ∞  
ATE(mix) dermal = ∞  
ATE(mix) inhal = ∞

- (a) acute toxicity: based on available data, the classification criteria are not met
- (b) skin corrosion/dermal irritation: based on available data, the classification criteria are not met
- (c) severe ocular damage/eye irritation: based on available data the classification criteria are not met
- (d) respiratory or skin sensitization: based on available data the classification criteria are not met
- (e) germ cell mutagenicity: based on available data the classification criteria are not met
- (f) carcinogenicity: based on available data the classification criteria are not met
- (g) reproductive toxicity: based on available data the classification criteria are not met
- (h) specific target organ toxicity (STOT) single exposure: based on available data the classification criteria are not met
- (i) specific target organ toxicity (STOT) repeated exposure: based on available data the classification criteria are not met
- (j) aspiration hazard: based on available data, the classification criteria are not met.

**11.2. Information on other hazards****11.2.1. Endocrine disrupting properties**

Based on available data, there are no substances with endocrine-disrupting properties.

**11.2.2. Other information**

No information on other hazards.

**SECTION 12: Ecological information****12.1. Toxicity**

Use according to good working practices, avoiding dispersing the product into the environment.

**12.2. Persistence and degradability**

Information not available

**12.3. Bioaccumulative potential**

Information not available

**12.4. Mobility in soil**

Information not available

**12.5. Results of PBT and vPvB assessment**

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII.

**12.6. Endocrine disrupting properties**

Information not available

**12.7. Other adverse effects**

No adverse effects observed



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## **SECTION 13: Disposal considerations**

### **13.1. Waste treatment methods**

Do not reuse empty containers. Dispose of them in accordance with current regulations. Any product residues should be disposed of according to current regulations by contacting authorized companies. Recover if possible. Operate according to current local or national regulations.

## **SECTION 14: Transport information**

### **14.1. UN number or ID number**

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

### **14.2. UN proper shipping name**

Not applicable

### **14.3. Transport hazard class(es)**

Not applicable

### **14.4. Packing group**

Not applicable

### **14.5. Environmental hazards**

Not applicable

### **14.6. Special precautions for user**

No data available

### **14.7. Maritime transport in bulk according to IMO instruments**

There is no provision for bulk transport

## **SECTION 15: Regulatory information**

### **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

D.Lgs 3/2/1997 No. 52 (Classification, packaging and labeling of dangerous substances), D.Lgs 14/3/2003 No. 65 (Classification, packaging and labeling of dangerous preparations), D.Lgs 81/08 (Consolidated text on the protection of health and safety in the workplace), D. M. 03/04/2007 (Implementation of Directive No. 2006/8/EC), Regulation (EC) No. 1907/2006 (REACH), Regulation (EC) No. 1272/2008 (CLP), Regulation (EC) No. 790/2009, Legislative Decree 105/2015 (Seveso Ter Directive), Regulation (EU) 2019/1021, Regulation (EU) 2020/878. Substances on Candidate List (art.59 REACH).

Based on available data, there are no SVHC substances present.

### **15.2. Chemical safety assessment**

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

## **SECTION 16: Other information**

Classification and procedure used to derive it under Regulation (EC)1272/2008 [CLP] in relation to mixtures:

No hazard to report.

Classification procedure: Calculation method.

**NCPK8831 – PYRUVATE KINASE****GENERAL BIBLIOGRAPHY**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EC) 758/2013 of the European Parliament
  4. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
  5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
  6. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  7. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  8. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  9. Regulation (EU) 517/2013 of Council
  10. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  11. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  12. Regulation (EU) 2015/491 of the European Parliament
  13. Regulation (EU) No. 1297/2014 of the Commission
  14. Regulation (EC) 528/2012 of the European Parliament and subsequent updates
  15. Regulation (EC) 648/2004 of the European Parliament and subsequent updates
- The Merck Index.
  - Handling Chemical Safety
  - Niosh – Registry of Toxic Effects of Chemical Substances
  - INRS - Fiche Toxicologique
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition

**Note for users:**

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This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

This SDS replaces and cancels all previous ones.



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**NCPK8831 – PYRUVATE KINASE**

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# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Code: **NCPK8831**  
Product name: **PYRUVATE KINASE\_R5 (Reagent)**

**1.2 Relevant identified uses of the substance or mixture and uses advised against**  
Identified use: **Reagent for in-vitro diagnostic**

### 1.3 Details of the supplier of the safety data sheet

Name: **Mascia Brunelli S.p.A.**  
Full address: **Viale Monza, 272**  
District and Country: **20128 Milano (Milano)**  
**Italia**  
  
Tel. **0039 02 252091**

e-mail address of the competent person

responsible for the Safety Data Sheet: **[mktg@masciabrunelli.it](mailto:mktg@masciabrunelli.it)**

### 1.4 Emergency telephone number

For urgent inquiries refer to: **NHS111 in England: 111**  
**NHS24 in Scotland: 111**  
**NHS Direct in Wales: 111 or 0845 4647**  
**In an emergency, if the patient has collapsed or is not breathing properly, call 999**

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements).

Hazard classification and indication: -

### 2.2 Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms: --

Signal words: --

Hazard statements: --

Precautionary statements: --

### 2.3 Other hazards

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII.

No information on other hazards.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Irrilevant



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### 3.2 Mixtures

No substance to signal.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Inhalation: air the area. Immediately move the patient from the contaminated area and keep him at rest in a well-ventilated area. If you feel unwell seek medical advice.

Direct skin contact (of the pure product): wash thoroughly with soap and water.

Direct eye contact (of pure product): wash immediately with plenty of water for at least 10 minutes.

Ingestion: not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine.

### 4.2. Most important symptoms and effects, both acute and delayed

Information not available

### 4.3. Indication of any immediate medical attention and special treatment needed

Information not available

## SECTION 5: Fire fighting measures

### 5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: Foam. Dry powder. Carbon dioxide. Water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

Water jets. Use water jets only to cool container surfaces exposed to fire.

### 5.2. Special hazards arising from the substance or mixture

Information not available

### 5.3. Advice for firefighters

Use respiratory protection. Safety helmet and full protective clothing. Water spray can be used to protect people engaged in extinguishing. It is also advisable to use self-contained breathing apparatus, especially, if working in enclosed and poorly ventilated places and in any case if halogenated extinguishing agents (fluobrene, solkan 123, NAF, etc.) are used. Cool containers with jets of water.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel: leave the area surrounding the spill or release. Do not smoke. Wear gloves and protective clothing.

6.1.2 For emergency responders: Wear gloves and protective clothing. Eliminate all unguarded flames and possible sources of ignition. Do not smoke. Provide adequate ventilation. Evacuate the danger area and, in case, consult an expert.

### 6.2. Environmental precautions

Contain spills with earth or sand. If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the authorities. Dispose of the residue in accordance with applicable regulations.

### 6.3. Methods and material for containment and cleaning up

6.3.1 For containment. Collect the product for reuse, if possible, or for disposal. If possible, absorb it with inert material. Prevent it from entering the sewage system.



6.3.2 For cleanup. After collection, wash the affected area and materials with water.

6.3.3 Other information: None in particular.

#### **6.4. Reference to other sections**

Any information on personal protection and disposal is given in sections 8 and 13.

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

Avoid contact and inhalation of vapors.  
Do not eat or drink while working.  
See also section 8 below.

#### **7.2. Conditions for safe storage, including any incompatibilities**

Keep in original container closed tightly. Do not store in open or unlabeled containers. Keep containers upright and safe by avoiding the possibility of falls or collisions. Store in a cool place, away from any source of heat and direct exposure to sunlight.

#### **7.3. Specific end use(s)**

Professional uses:  
Handle with care.  
Store in ventilated place and away from heat sources.  
Keep container tightly closed.

### **SECTION 8: Exposure controls/personal protection**

#### **8.1. Control parameters**

No data available.

#### **8.2. Exposure controls**

Appropriate engineering controls:  
Professional uses:  
No specific controls provided

Individual protective measures:

**HAND PROTECTION**  
None required for normal use.

**SKIN PROTECTION**  
Wear normal work clothing.

**EYE PROTECTION**  
None required for normal use.

**RESPIRATORY PROTECTION**  
None required for normal use.

**THERMAL HAZARDS**  
No hazard to report

**ENVIRONMENTAL EXPOSURE CONTROLS**  
Use according to good working practices, avoiding spillage into the environment.



**NCPK8831 – PYRUVATE KINASE****SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>Properties</b>	<b>Value</b>	<b>Information</b>
Appearance	liquid	
Colour	Not determined	
Odour	Not determined	
Melting point / freezing point	Not determined	
Initial boiling point	Not determined	
Flammability	Not determined	
Lower explosive limit	Not determined	
Upper explosive limit	Not determined	
Flash point	Not determined	
Auto-ignition temperature	Not determined	
pH	Not determined	
Kinematic viscosity	Not determined	
Solubility	Not determined	
Partition coefficient: n-octanol/water	Not determined	
Vapour pressure	Not determined	
Density and/or relative density	Not determined	
Relative vapour density	Not determined	
Particle characteristics	Not determined	

**9.2. Other information**

## 9.2.1. Information with regard to physical hazard classes

Information not available

## 9.2.2. Other safety characteristics

Information not available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

**10.2. Chemical stability**

No hazardous reaction when handled and stored according to provisions.

**10.3. Possibility of hazardous reactions**

No hazardous reactions are foreseeable in normal conditions of use and storage.

**10.4. Conditions to avoid**

None in particular.

**10.5. Incompatible materials**

None in particular.

**NCPK8831 – PYRUVATE KINASE****10.6. Hazardous decomposition products**

Does not decompose when used for its intended uses.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

ATE(mix) oral = ∞  
ATE(mix) dermal = ∞  
ATE(mix) inhal = ∞

- (a) acute toxicity: based on available data, the classification criteria are not met
- (b) skin corrosion/dermal irritation: based on available data, the classification criteria are not met
- (c) severe ocular damage/eye irritation: based on available data the classification criteria are not met
- (d) respiratory or skin sensitization: based on available data the classification criteria are not met
- (e) germ cell mutagenicity: based on available data the classification criteria are not met
- (f) carcinogenicity: based on available data the classification criteria are not met
- (g) reproductive toxicity: based on available data the classification criteria are not met
- (h) specific target organ toxicity (STOT) single exposure: based on available data the classification criteria are not met
- (i) specific target organ toxicity (STOT) repeated exposure: based on available data the classification criteria are not met
- (j) aspiration hazard: based on available data, the classification criteria are not met.

**Health hazards:**

Contact with eyes: accidental contact with the eyes may cause irritation.

Contact with skin: the product is not an irritant. Repeated and prolonged direct contact can degrease and irritate the skin and cause dermatitis in some cases.

Ingestion: ingestion may cause product mucosal irritation of the throat and digestive system resulting in abnormal digestive symptoms and intestinal disorders.

Inhalation: prolonged Exposure to vapors or mists of product may cause irritation to the respiratory tract.

**11.2. Information on other hazards****11.2.1. Endocrine disrupting properties**

Based on available data, there are no substances with endocrine-disrupting properties.

**11.2.2. Other information**

No information on other hazards.

**SECTION 12: Ecological information****12.1. Toxicity**

Use according to good working practices, avoiding dispersing the product into the environment.

**12.2. Persistence and degradability**

Information not available

**12.3. Bioaccumulative potential**

Information not available

**12.4. Mobility in soil**

Information not available

**12.5. Results of PBT and vPvB assessment**

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII.



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#### 12.6. Endocrine disrupting properties

Information not available

#### 12.7. Other adverse effects

No adverse effects observed

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with current regulations. Any product residues should be disposed of according to current regulations by contacting authorized companies. Recover if possible. Operate according to current local or national regulations.

### SECTION 14: Transport information

#### 14.1. UN number or ID number

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

#### 14.2. UN proper shipping name

Not applicable

#### 14.3. Transport hazard class(es)

Not applicable

#### 14.4. Packing group

Not applicable

#### 14.5. Environmental hazards

Not applicable

#### 14.6. Special precautions for user

No data available

#### 14.7. Maritime transport in bulk according to IMO instruments

There is no provision for bulk transport

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

D.Lgs 3/2/1997 No. 52 (Classification, packaging and labeling of dangerous substances), D.Lgs 14/3/2003 No. 65 (Classification, packaging and labeling of dangerous preparations), D.Lgs 81/08 (Consolidated text on the protection of health and safety in the workplace), D. M. 03/04/2007 (Implementation of Directive No. 2006/8/EC), Regulation (EC) No. 1907/2006 (REACH), Regulation (EC) No. 1272/2008 (CLP), Regulation (EC) No. 790/2009, Legislative Decree 105/2015 (Seveso Ter Directive), Regulation (EU) 2019/1021, Regulation (EU) 2020/878. Substances on Candidate List (art.59 REACH).

Based on available data, there are no SVHC substances present.

#### 15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.



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**SECTION 16: Other information**

Classification and procedure used to derive it under Regulation (EC)1272/2008 [CLP] in relation to mixtures:

No hazard to report.

Classification procedure: Calculation method.

**GENERAL BIBLIOGRAPHY**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EC) 758/2013 of the European Parliament
  4. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
  5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
  6. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  7. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  8. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  9. Regulation (EU) 517/2013 of Council
  10. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  11. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  12. Regulation (EU) 2015/491 of the European Parliament
  13. Regulation (EU) No. 1297/2014 of the Commission
  14. Regulation (EC) 528/2012 of the European Parliament and subsequent updates
  15. Regulation (EC) 648/2004 of the European Parliament and subsequent updates
- The Merck Index.
  - Handling Chemical Safety
  - Niosh – Registry of Toxic Effects of Chemical Substances
  - INRS - Fiche Toxicologique
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition

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