

## Creatine Kinase

Version  
1.7

Revision Date:  
15.02.2015

Date of last issue: 02.12.2014  
Date of first issue: 20.03.2013

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

#### 1.1 Product identifier

Commercial Product Name : Creatine Kinase  
Mat.-No./ Genisys-No. : 04524977190

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended restrictions on use : For professional users only.

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

Company : Roche Diagnostics Deutschland GmbH  
-  
Sandhoferstrasse 116  
68305 Mannheim  
E-mail address : mannheim.umweltschutz@roche.com  
Telephone : +496217590  
Telefax : +496217592890  
Responsible Department : +49(0)621-759-2012+49(0)621-759-4848+49(0)8856-60-2629

#### 1.4 Emergency telephone number

In case of emergencies: : Central Works Security +49(0)621-759-2203  
Roche Diagnostics GmbH  
Centre for detoxification: : Mainz +49(0)6131-19240  
Munich +49(0)89-19240

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

The product is a kit consisting of individual ingredients. The classification of the ingredients can be obtained from section 3. Section Label elements contains the resulting labelling for the kit.

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H360D May damage the unborn child.

Precautionary statements : **Prevention:**  
P201 Obtain special instructions before use.  
P280 Wear protective gloves/ protective clothing/  
eye protection/ face protection.

**Response:**

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P308 + P313

IF exposed or concerned: Get medical advice/ attention.

**Disposal:**  
P501

Dispose of contents/ container to an approved waste disposal plant.

### Additional Labelling:

Restricted to professional users.

### 2.3 Other hazards

See SECTION 3

## SECTION 3: Composition/information on ingredients

### R1 (A / B)

#### Classification (REGULATION (EC) No 1272/2008)

Reproductive toxicity, Category 1A

H360D: May damage the unborn child.

#### Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture.

#### Hazardous components

| Chemical Name | CAS-No.<br>EC-No.<br>Registration<br>number | Classification<br>(67/548/EEC)              | Classification<br>(REGULATION<br>(EC) No<br>1272/2008)                              | Concentration<br>(%) |
|---------------|---------------------------------------------|---------------------------------------------|-------------------------------------------------------------------------------------|----------------------|
| imidazole     | 288-32-4<br>206-019-2                       | Xn; Xn; R22<br>C; C; R34<br>Repr.Cat.1; R61 | Acute Tox. 4; H302<br>Skin Corr. 1B;<br>H314<br>Eye Dam. 1; H318<br>Repr. 1A; H360D | >= 0,3 - < 0,5       |

For explanation of abbreviations see section 16.

### R2 (C)

#### Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

#### Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture.

#### Hazardous components

Remarks : No hazardous ingredients

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice

: Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.

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- Do not leave the victim unattended.
- If inhaled : Move to fresh air.  
If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : If on skin, rinse well with water.
- In case of eye contact : Immediately flush eye(s) with plenty of water.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.  
Take victim immediately to hospital.  
Rinse mouth with water.

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

Symptoms : No information available.

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

Treatment : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

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### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : High volume water jet

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

Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.

#### 5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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### SECTION 6: Accidental release measures

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

Personal precautions : Use personal protective equipment.  
Refer to protective measures listed in sections 7 and 8.

#### 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
Local authorities should be advised if significant spillages cannot be contained.

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

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

Treat recovered material as described in the section "Disposal considerations".

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours/dust.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : When using do not eat or drink. When using do not smoke.  
Wash hands before breaks and at the end of workday.

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

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions : See label, package insert or internal guidelines

Storage class (TRGS 510) : 6.1D, Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

Other data : No decomposition if stored and applied as directed.

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### 7.3 Specific end use(s)

Specific use(s) : Laboratory chemicals

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### **R1 (A / B)**

Contains no substances with occupational exposure limit values.

#### **R2 (C)**

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### **Personal protective equipment**

Eye protection : Eye wash bottle with pure water  
Tightly fitting safety goggles

Hand protection

Material : Protective gloves

Remarks : The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. This recommendation is only valid for the product mentioned in the safety data sheet and provided by us and for the application specified by us. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### **R1 (A / B)**

Appearance : liquid

Colour : No data available

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|                                        |                                                            |
|----------------------------------------|------------------------------------------------------------|
| Odour                                  | : No data available                                        |
| Odour Threshold                        | : No data available                                        |
| pH                                     | : 6,0                                                      |
| Melting point/range                    | : No data available                                        |
| Boiling point/boiling range            | : No data available                                        |
| Flash point                            | : does not flash                                           |
| Evaporation rate                       | : No data available                                        |
| Flammability (solid, gas)              | : No data available                                        |
| Upper explosion limit                  | : No data available                                        |
| Lower explosion limit                  | : No data available                                        |
| Vapour pressure                        | : No data available                                        |
| Relative vapour density                | : No data available                                        |
| Relative density                       | : No data available                                        |
| Density                                | : 1,01 g/cm <sup>3</sup>                                   |
| Solubility(ies)                        |                                                            |
| Water solubility                       | : completely miscible                                      |
| Partition coefficient: n-octanol/water | : No data available                                        |
| Ignition temperature                   | : No data available                                        |
| Auto-ignition temperature              | : No data available                                        |
| Decomposition temperature              | : No data available                                        |
| Viscosity                              | : No data available                                        |
| Explosive properties                   | : No data available                                        |
| Oxidizing properties                   | : The substance or mixture is not classified as oxidizing. |

### **R2 (C)**

|                             |                     |
|-----------------------------|---------------------|
| Appearance                  | : liquid            |
| Colour                      | : No data available |
| Odour                       | : No data available |
| Odour Threshold             | : No data available |
| pH                          | : 9,0               |
| Melting point/range         | : No data available |
| Boiling point/boiling range | : No data available |
| Flash point                 | : does not flash    |
| Evaporation rate            | : No data available |
| Flammability (solid, gas)   | : No data available |
| Upper explosion limit       | : No data available |
| Lower explosion limit       | : No data available |

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|                                        |                                                            |
|----------------------------------------|------------------------------------------------------------|
| Vapour pressure                        | : No data available                                        |
| Relative vapour density                | : No data available                                        |
| Relative density                       | : No data available                                        |
| Density                                | : 1,137 g/cm <sup>3</sup>                                  |
| Solubility(ies)                        |                                                            |
| Water solubility                       | : completely miscible                                      |
| Partition coefficient: n-octanol/water | : No data available                                        |
| Ignition temperature                   | : No data available                                        |
| Auto-ignition temperature              | : No data available                                        |
| Decomposition temperature              | : No data available                                        |
| Viscosity                              | : No data available                                        |
| Explosive properties                   | : No data available                                        |
| Oxidizing properties                   | : The substance or mixture is not classified as oxidizing. |

### 9.2 Other information

#### **R1 (A / B)**

No data available

#### **R2 (C)**

No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

### 10.4 Conditions to avoid

Conditions to avoid : No data available

### 10.5 Incompatible materials

Materials to avoid : No data available

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### 10.6 Hazardous decomposition products

No data available

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### **R1 (A / B)**

##### **Acute toxicity**

Not classified based on available information.

##### **Components:**

###### **imidazole:**

Acute oral toxicity : LD50 Oral (Rat): 970 mg/kg

##### **Skin corrosion/irritation**

Not classified based on available information.

##### **Components:**

###### **imidazole:**

Result: Causes burns.

Remarks: Extremely corrosive and destructive to tissue.

##### **Serious eye damage/eye irritation**

Not classified based on available information.

##### **Components:**

###### **imidazole:**

Remarks: May cause irreversible eye damage.

##### **Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

##### **Germ cell mutagenicity**

Not classified based on available information.

##### **Carcinogenicity**

Not classified based on available information.

##### **Reproductive toxicity**

May damage the unborn child.

##### **Components:**

###### **imidazole:**

Reproductive toxicity - Assessment : May damage the unborn child., Known human reproductive toxicant

##### **STOT - single exposure**

Not classified based on available information.

##### **STOT - repeated exposure**

Not classified based on available information.

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### Aspiration toxicity

Not classified based on available information.

**R2 (C)**

### Acute toxicity

Not classified based on available information.

### Skin corrosion/irritation

Not classified based on available information.

### Serious eye damage/eye irritation

Not classified based on available information.

### Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

### Germ cell mutagenicity

Not classified based on available information.

### Carcinogenicity

Not classified based on available information.

### Reproductive toxicity

Not classified based on available information.

### STOT - single exposure

Not classified based on available information.

### STOT - repeated exposure

Not classified based on available information.

### Aspiration toxicity

Not classified based on available information.

## SECTION 12: Ecological information

### 12.1 Toxicity

**R1 (A / B)**

#### Components:

##### imidazole:

- |                                                     |                                                                                 |
|-----------------------------------------------------|---------------------------------------------------------------------------------|
| Toxicity to fish                                    | : LC50 (Leuciscus idus (Golden orfe)): 100 - 500 mg/l<br>Exposure time: 48 h    |
| Toxicity to daphnia and other aquatic invertebrates | : EC50 (Daphnia magna (Water flea)): 341,5 mg/l<br>Exposure time: 48 h          |
| Toxicity to algae                                   | : IC50 (Desmodesmus subspicatus (green algae)): 130 mg/l<br>Exposure time: 72 h |
| Toxicity to bacteria                                | : EC50 (Pseudomonas putida): 1.200 mg/l<br>Exposure time: 17 h                  |
| Ecotoxicology Assessment<br>Acute aquatic toxicity  | : This product has no known ecotoxicological effects.                           |

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Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to the environment : No data available

### **R2 (C)**

No data available

## 12.2 Persistence and degradability

### **R1 (A / B)**

#### Components:

##### **imidazole:**

Biodegradability : Biodegradation: 83 %  
Exposure time: 8 d  
Method: OECD Test Guideline 302

### **R2 (C)**

No data available

## 12.3 Bioaccumulative potential

### **R1 (A / B)**

#### Components:

##### **imidazole:**

Partition coefficient: n-octanol/water : log Pow: -0,02  
Method: OECD Test Guideline 107

### **R2 (C)**

No data available

## 12.4 Mobility in soil

### **R1 (A / B)**

No data available

### **R2 (C)**

No data available

## 12.5 Results of PBT and vPvB assessment

### **R1 (A / B)**

Not relevant

### **R2 (C)**

Not relevant

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### 12.6 Other adverse effects

#### **R1 (A / B)**

##### Components:

##### **imidazole:**

Additional ecological information : Remarks: No data available

#### **R2 (C)**

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.  
Can be disposed as waste water, when in compliance with local regulations.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.  
Do not re-use empty containers.

## SECTION 14: Transport information

### 14.1 UN number

Not regulated as a dangerous good

### 14.2 UN proper shipping name

Not regulated as a dangerous good

### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

### 14.4 Packing group

Not regulated as a dangerous good

### 14.5 Environmental hazards

Not regulated as a dangerous good

### 14.6 Special precautions for user

Remarks : Not dangerous goods in the meaning of ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks : Not applicable

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### SECTION 15: Regulatory information

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

Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances  
Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.  
Not applicable

Water contaminating class : WGK 1 slightly water endangering  
(Germany)

#### R1 (A / B)

##### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H360D May damage the unborn child.

Precautionary statements : **Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
**Storage:**  
P405 Store locked up.  
**Disposal:**  
P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

288-32-4 imidazole

##### Additional Labelling:

Restricted to professional users.

#### R2 (C)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



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### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

## SECTION 16: Other information

### Full text of R-Phrases

R22 : Harmful if swallowed.  
R34 : Causes burns.  
R61 : May cause harm to the unborn child.

### Full text of H-Statements

H302 : Harmful if swallowed.  
H314 : Causes severe skin burns and eye damage.  
H318 : Causes serious eye damage.  
H360D : May damage the unborn child.

### Full text of other abbreviations

Acute Tox. : Acute toxicity  
Eye Dam. : Serious eye damage  
Repr. : Reproductive toxicity  
Skin Corr. : Skin corrosion

### Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

DE / EN