20X Creatine Kinase

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This Safety Data Sheet contains information concerning the potential risks to those involved in handling, transporting and working with the material, as well as describing potential risks to the consumer and the environment. This information must be made available to those who may come into contact with the material or are responsible for the use of the material. This Safety Data Sheet is provided on a voluntary basis and follows the formatting described in the REACH Regulation (EC) No 1907/2006 and the CLP Regulation (EC) No 1272/2008.

Section 1: Identification of the substance/mixture and of the company/undertaking

1

- 1.1 Product identifier Creatine Kinase
- 1.2 Relevant identified uses of the substance or mixture and uses advised against Laboratory reagent
- 1.3 Details of the supplier of the safety data sheet

TwistDx Ltd

Abbott House

Vanwall Business Park

Vanwall Road

Maidenhead SL6 4XE

United Kingdom

Telephone: +1-877-450-6901 E-mail info@twistdx.co.uk

1.4 Emergency telephone number

In case of emergency Tel. +1-703-741-5970 (+1-800-424-9300 for US, Canada)

Section 2: Hazards Identification

2

- 2.1 Classification of the substance or mixture
 Respiratory Sensitiser Category 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- 2.2 Label elements





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H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

P261 Avoid breathing mist/spray.

P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a

position comfortable for breathing.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

P501 Dispose of contents/container as hazardous waste.

2.3 Other hazards

No special hazards.

Section 3: Composition

3

3.1 Substances

Not applicable, the product is a mixture

3.2 Mixtures

Name	CAS No, EC No, Registration No (if available)	Concentration	Classification
Creatine kinase	9001-15-4 232-585-5	20%	Resp. Sens. 1 H334

See section 16 for full description of R phrases and H statements.

Section 4: First Aid Measures

4

4.1 Description of first aid measures

EYE CONTACT: Wash thoroughly with water and obtain medical attention if signs of discomfort.

INHALATION: Remove from exposure. If breathing becomes difficult call a doctor. SKIN CONTACT: Wash off with soap and water. Seek medical attention if irritation occurs. INGESTION: If swallowed, rinse mouth with water.

- 4.2 Most important symptoms and effects, both acute and delayed Prolonged or repeated exposure may case mild irritation of the skin and eyes. Ingestion may result in nausea and discomfort. Repeated inhalation of enzyme spray or dust following inappropriate handling may result in sensitisation and cause allergic reactions in sensitised individuals.
- 4.3 Indication of any immediate medical attention and special treatments needed



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Symptomatic treatment as required

Section 5: Firefighting Measures

5

- 5.1 Extinguishing media
 Not combustible. Use extinguishing media appropriate to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No special hazards.
- 5.3 Advice for fire fighters
 No special measures required.

Section 6: Accidental Release Measures

6

- 6.1 Personal precautions, protective equipment and emergency procedures
 Remove unnecessary personnel away from area of spill or contamination. Wear suitable
 protective clothing including eye protection, gloves and lab coat or coveralls. See section 8
 for more information.
- 6.2 Environmental precautions
 Prevent entry into drains and watercourses.
- 6.3 Methods and materials for containment and clearing up Small quantities (<500 mls) may be flushed to drain with plenty of running water. Larger quantities should be absorbed onto a suitable absorbent or paper towels and place in a sealed container for disposal. Wash spill area thoroughly with water and detergent.
- 6.4 References to other sections
 See section 8 for further advice on protective equipment and section 13 for advice on disposal.

Section 7: Handling and Storage

7

- 7.1 Precautions for safe handling Avoid unnecessary skin and eye contact. Wash thoroughly after handling and before eating and drinking.
- 7.2 Conditions for safe storage, including any incompatibilities Store in a cool, dry, well ventilated place.
- 7.3 Specific end uses(s)
 Only for use as a laboratory reagent.



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Section 8. Exposure Controls/Personal Protection

8

8.1 Control parameters

No exposure limits available

8.2 Exposure controls

Engineering controls

None usually required. If spray or mist are likely to be generated, handle in a fume cupboard.

Respiratory protection

Not normally required. If spray or mists are likely to be generated, respiratory protection may be required.

Hand Protection

Wear suitable chemical resistant gloves. Change gloves in accordance with manufacturer recommendations. If gloves are damaged during use, remove immediately and wash hands before replacing with new gloves.

Eye protection

Wear safety glasses with side protection to prevent splashes to the eye.

Skin protection

Wear suitable protective clothing – lab coat or coveralls. These should be changed after use or if contaminated. Wash before re-use.

Environmental Exposure

Prevent unnecessary releases to the environment.

Section 9: Physical and Chemical Properties

9

9.1 Information on basic physical and chemical properties

Appearance: Clear liquid
Odour: No odour
Odour threshold: Not applicable

pH: No data

Melting point: Similar to water Boiling point: Similar to water Flashpoint: Not flammable



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Evaporation rate:

Flammability (gas, solid):

Upper/lower flammability limits:

Vapour pressure:

Vapour density:

Relative density:

Similar to water

Similar to water

Similar to water

Approximately 1.0

Solubility in water: Soluble Solubility in other solvents: No data Partition coefficient (log Kow): No data

Autoignition temperature: Not flammable

Decomposition temperature: No data Viscosity: No data

Explosive properties: Not classified as explosive Oxidising properties: Not classified as oxidising

9.2 Other information

None

Section 10: Stabtility and Reactivity

10

- 10.1 Reactivity

 No reactive hazards known
- 10.2 Chemical stability
 Stable under normal conditions.
- 10.3 Possibility of hazardous reactions Not expected to occur.
- 10.4 Conditions to avoid Excessive heat.
- 10.5 Incompatible materials Strong oxidisers.
- 10.6 Hazardous decomposition products
 None known

Section 11: Toxicological Information

11



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11.1 Information on toxicological effects

This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its major components.

(a) acute toxicity Not expected to be acutely toxic

(b) skin corrosion/irritation Splashes may be mildly irritating to skin. (c) serious eye damage/irritation Splashes to the eye may be mildly irritating.

(d) respiratory/skin sensitisation Repeated inhalation of enzyme spray or dust following

inappropriate handling may result in sensitisation and cause

allergic reactions in sensitised individuals.

(e) germ cell mutagenicity Contains no substances classified for germ cell mutagenicity.

(f) carcinogenicity Contains no known carcinogens

(g) reproductive toxicity Contains no known reproductive toxicants.

(h) STOT-single exposure Contains no substances classified for target organ toxicity

following single exposure.

(i) STOT-repeated exposure Contains no substances classified for target organ toxicity

following repeat exposure.

(j) aspiration hazard Contains no substances known to present an aspiration

hazard.

Section 12: Ecological Information

12

This product has not been tested. Judgements on the expected environmental effects of this product have been made based upon consideration of its major components.

12.1 Toxicity

None of the components are classified as hazardous to the environment.

12.2 Persistence and degradability

The organic components are expected to be rapidly biodegraded.

12.3 Bioaccumulative potential

None of the components are expected to bioaccumulate

12.4 Mobility in soil

All components are soluble

12.5 Results of PBT and vPvB assessment

A formal PBT/vPvB assessment has not been carried out, but none of the components are expected to be PBT or vPvB.



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12.6 Other adverse effects None known.

Section 13: Disposal Considerations

13

13.1 Waste treatment methods

Small quantities of this material (< 500 millilitres) may be disposed of by flushing with an excess of water to foul drainage. A dilution factor of at least 100 is recommended. Larger quantities of waste should be disposed of in a manner that complies with local regulations. Advice should be sought from local agencies.

Section 14: Transport Information

14

14.1 UN Number Not classified as hazardous

14.2 UN Proper shipping name Not applicable

14.3 Transport hazard class(es) Not applicable

14.4 Packing group

14.5 Environmental hazards

14.6 Special precautions for user

Not applicable Not applicable

None

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not transported in bulk

Section 15: Regulatory Information

15

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture. All components are listed as existing substances in Europe
- 15.2 Chemical Safety Assessment
 A Chemical Safety Assessment has not been carried out for this product.

Section 16: Other Information

16

Revision information:

Revised to update to new REACH and CLP formatting requirements. Reclassified as a respiratory sensitiser.

List of Abbreviations used in this SDS:

CAS Chemical Abstracts Service



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CLP Classification, Labelling and Packaging Regulation (EC) no 1272/2008

DSD Dangerous Substances Directive 67/548/EEC DPD Dangerous Preparations Directive 1999/45/EC

EC European Community/Commission
PBT Persistent, Bioaccumulative and Toxic

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC)

no 1907/2006

vPvB very Persistent, very Bioaccumulative

References:

ECHA Classification and Labelling Inventory and Database of Disseminated Registration Dossiers

Method used for classification of mixtures:

Ingredient based approaches

R Phrases and H Statements used in Section 3

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Training requirements for workers

None

