



# Material Safety Data Sheet

Issue/Revision Date: 16th March, 2010

## 1. Identification of the substance/preparation and of the company/undertaking

Proper Shipping Name	Glucose HK Kit
Product code	K-GLUHKL
Other Names	None
Company Name	Megazyme International Ireland Ltd.
Address	Bray Business Park, Southern Cross Road, Bray, Co. Wicklow, Ireland.
Contact point	Dr. Barry McCleary, PhD, DScAgr
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The quantities of the individual reagents supplied in this kit present no specific hazards, alone or in combination, when used and stored as directed. For more information refer to the K-GLUHKL booklet.

## 2. Composition/information on ingredients

This kit contains the following reagents :-

Chemical name	CAS #	EC #	Symbol	R-Phrases	S-Phrases
Buffer containing :-					
Imidazole	146-68-9	205-676-2	Xn	R11, R20/21/22, R36/37/38	S16, S22, S26, S36/37/39
Magnesium chloride*	7791-18-6	232-094-6	-	-	-
Freeze dried powder containing :-					
NADP <sup>+</sup>	1184-16-3	214-664-6	-	-	S22, S24/25
ATP	34369-07-8	213-579-1	-	-	-
Stabilised suspension containing :-					
Hexokinase	9001-51-8	232-611-5	-	-	-
Glucose-6-phosphate dehydrogenase*	9001-40-5	232-602-6	-	-	S24/25
Standard solution containing :-					
D-Glucose	50-99-7	200-075-1	-	-	-
*Sodium azide (0.02 % w/v)	26628-22-8	247-852-1	T+, N	R28, R32, R50/53	S28, S45, S60, S61

## 3. Hazards identification

The quantities of the individual products supplied in this kit present no specific hazards, alone or in combination, when used and stored as directed. However, certain sensitive individuals may develop allergic reactions.

### Physical/chemical hazards

### Human health hazards

## 4. First aid

The information in this section is given as general advice.

**General information** Seek medical advice in cases of accident or if you feel unwell when using this

<b>Ingestion</b>	product. Show the label where possible. If person is conscious immediately flush mouth with plenty of water. Never give anything by mouth to an unconscious person. Loosen any tight clothing ( <i>i.e.</i> collar, tie, belt or waistband). Do not induce vomiting without medical advice. Get medical advice.
<b>Eye contact</b>	Remove contact lenses if fitted. Flush eyes with plenty of water for at least 15 minutes. Get medical advice.
<b>Skin contact</b>	Immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Wash clothing and clean shoes before re-use. Get medical advice.
<b>Inhalation</b>	Move to fresh air. If breathing becomes difficult get medical advice.

## 5. Fire-fighting measures

<b>Flammability</b>	Not determined
<b>Extinguishing Media</b>	Dry chemical powder, water spray, carbon dioxide or foam.
<b>Specific hazards</b>	Burning may produce toxic and irritant fumes (nitrogen oxides, carbon monoxide, carbon dioxide).
<b>Fire Fighting Procedure</b>	Wear breathing apparatus and full protective clothing.
<b>Flash point</b>	Not determined
<b>Autoignition temperature</b>	Not determined

## 6. Accidental release measures

<b>Personal precautions</b>	Use personal protective equipment.
<b>Spill and leak</b>	Use personal protective equipment. Spillages of should be dealt with immediately. Sweep or mop up (avoid raising dust or aerosol) and place in a suitable container ready for disposal. Ventilate area and carefully wash any contaminated surfaces. Wash all contaminated clothing.
<b>Disposal</b>	Waste may be disposed of in approved landfill sites, incineration or other method in accordance with local, state and federal regulations.

## 7. Handling and storage

<b>Storage</b>	Stable for 5 years when stored in a cool (4°C) dry place.
<b>Handling</b>	Handle according to good hygiene, laboratory and safety practices. Wash hands after use, before eating, drinking or smoking and at the end of the workday. Use only in areas with adequate ventilation. Keep away from heat and sources of ignition. Avoid ingesting, breathing dust or aerosol, contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Wear laboratory coats (or other suitable protective clothing), approved safety glasses (with side shields) and gloves.
<b>Incompatible products</b>	NA

## 8. Exposure controls and personal protection

<b>Engineering measures</b>	Ensure adequate ventilation
<b>Respiratory protection</b>	A protective dust mask ( <i>e.g.</i> 3M 8810 mask, type N95 [US], type 1 [EN 143] <i>etc.</i> ) is advisable to avoid breathing particulates when a powdered form of the product is being handled. Use an approved respirator when aerosol, vapour or dust is generated.
<b>Eye Protection</b>	Approved safety glasses with side shields
<b>Hand Protection</b>	Gloves ( <i>e.g.</i> nitrile)
<b>Protective clothing</b>	Laboratory coat or any other protective clothing designed to minimise skin contact.

## 9. Physical and chemical properties

<b>Appearance</b>	The kit contains four (4) or six (6) glass vials
<b>Solubility in water</b>	NA
<b>Melting point</b>	NA
<b>Hazardous decomposition products</b>	Not determined
<b>Odour</b>	NA

## 10. Stability and reactivity

<b>Stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	NA
<b>Solubility in Water</b>	NA
<b>Melting point</b>	NA

## 11. Toxicological information

To the best of our knowledge, the chemical, physical and toxicological properties of this product have not been fully investigated.

**Chronic toxicity**  
**Potential health effects**

## 12. Ecological information

<b>Ecotoxicity effects</b>	No data available.
<b>Bioaccumulation</b>	No data available.
<b>Persistence and degradability</b>	No data available.

## 13. Disposal considerations

<b>Product</b>	Unused product may be disposed of in approved landfill sites, incineration or other method in accordance with local, state and federal regulations.
<b>Contaminated packaging</b>	Dispose of in the same manner as unused product.

## 14. Transport information

<b>RID/ADR</b>	Not controlled under ADR (Europe).
<b>IMDG/IMO</b>	Not hazardous for transport by sea.
<b>ICAO/IATA</b>	Not hazardous for transport by air.
<b>DOT (US)</b>	Not classified as dangerous goods.

## 15. Regulatory information

<b>EU regulations</b>		
	<b>Classification</b>	NA
	<b>Risk phrases</b>	NA
	<b>Safety phrases</b>	NA

## 16. Other information

<b>Precautions</b>	For laboratory use only. Not for drug, household or other uses.
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