



Material Safety Data Sheet

Issue/Revision Date: 16 March, 2010

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

Proper Shipping Name	Acetic acid (acetate kinase) assay kit
Product code	K-ACETAK
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
Emergency Telephone	+353-1-2861220
Tel/Fax	Tel: +353-1-2861220/Fax: +353-1-2861264

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-ACETAK booklet.

2. Composition/information on ingredients

This kit contains the following reagents :-

Chemical name	CAS #	EC #	Symbol	R-Phrases	S-Phrases
Buffer containing :-					
Tris-HCl	1185-53-1	214-684-5	Xi	R36/37/38	S26, S36
Magnesium chloride*	7791-18-6	232-094-6	-	-	-
Tablets containing :-					
NADH	606-68-8	210-123-3	-	-	-
ATP	34369-07-8	213-579-1	-	-	-
PEP	10526-80-4	234-084-7	-	-	-
PVP	9003-39-8	201-800-4	-	-	S22, S24/25
Stabilised suspension containing :-					
Acetate kinase	9027-42-3	232-818-0	-	-	-
Pyruvate kinase	9001-59-6	232-616-2	-	-	-
D-lactate dehydrogenase*	9028-36-8	232-829-0	-	-	-
*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 product. Show the label where possible.

Ingestion

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.e.* collar, tie, belt or waistband). Do not induce vomiting without medical advice. Get medical help.

Eye contact	Remove contact lenses if fitted. Flush eyes with plenty of water for at least 15 minutes. Get medical advice.
Skin contact	Immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Wash clothing and clean shoes before reuse. Get medical advice.
Inhalation	Move to fresh air. If breathing becomes difficult get medical advice.

5. Fire-fighting measures

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

6. Accidental release measures

Personal precautions	Use personal protective equipment.
Spill and leak	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.
Disposal	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

Storage	Stable for 5 years when stored in a cool (4°C) dry place.
Handling	Handle according to good hygiene, laboratory and safety practice. 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.
Incompatible products	NA

8. Exposure controls and personal protection

Engineering measures	Ensure adequate ventilation
Respiratory protection	A protective dust mask (e.g. 3M 8810 mask, type N95 [US], type 1 [EN 143] etc.) 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.
Eye Protection	Approved safety glasses with side shields
Hand Protection	Gloves (<i>e.g.</i> nitrile)
Protective clothing	Laboratory coat or any other protective clothing designed to minimise skin contact.

9. Physical and chemical properties

Appearance	The kit contains one (1) glass vials and two (2) plastic containers
Solubility in water	NA

Melting point	NA
Hazardous decomposition products	Not determined
Odour	NA

10. Stability and reactivity

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

Ecotoxicity effects	No data available.
Bioaccumulation	No data available.
Persistence and degradability	No data available.

13. Disposal considerations

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

14. Transport information

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

15. Regulatory information

EU regulations		
	Classification	NA
	Risk phrases	NA
	Safety phrases	NA

16. Other information

Precautions For laboratory use only. Not for drug, household or other uses.

Disclaimer The information and recommendations contained herein are to the best of our knowledge reliable. However, Megazyme International Ireland Ltd. does not guarantee the accuracy or completeness of the information and as such this document should be used as a guide only. In addition, nothing herein is to be construed as a warranty or representation in respect of safety in use, suitability efficiency or otherwise, including freedom from patent infringements. Users should make their own tests for their particular purpose. We cannot accept any liability for any loss, damage or infringement arising from the use of the information or recommendations contained herein.