Material Safety Data Sheet

CK-NAC IFCC S.V.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: CK-NAC IFCC S.V.

Catalog Numbers: TL14101, TR14103, TR14110, TR14115.

Use: This reagent is intended for the in vitro quantitative determination of CK (ATP:Creatine N-phosphotransferase, EC 2.7.3.2) in human serum on both manual and automated systems.

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24 Hour Emergency Assistance
1-800-255-3924

2. HAZARD IDENTIFICATION

Not classified as hazardous according to the EU criteria.

Hazard Classification: NON-HAZARDOUS SUBSTANCE, NON DANGEROUS GOODS.

Hazard Category: None allocated.

RISK PHRASES
None allocated.

SAFETY PHRASES –Reagent
S22 Do not breathe dust.
SAFETY PHRASES – Buffer
S23 Do not breathe vapour.
S24/25 Avoid contact with skin and eyes.

Poison Schedule: None allocated [Aust].

3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME	Proportion	CAS Number

All other ingredients determined not to be hazardous according to the EU criteria.

4. FIRST AID MEASURES

Swallowed: If swallowed, **DO NOT** induce vomiting. Give 1 to 2 glasses of water to drink. Seek immediate medical assistance.

Eye: If product enters the eyes, flush with plenty of water for at least 15 minutes, ensuring eye lids are held open. If irritation develops or persists, immediately transport to hospital or doctor.

Skin: If product contacts the skin, remove any contaminated clothing and wash skin thoroughly with soap and water. If irritation persists transport to hospital or doctor.

Inhaled: Move victim to fresh air. Apply resuscitation if victim is not breathing.

First Aid Facilities: Eye wash fountain, safety shower and normal wash room facilities.

Advice to Doctor: Treat symptomatically.

4. FIRST AID MEASURES

In case of poisoning, contact Poisons Information Centre
In Australia call Tel: 131126
In New Zealand Tel: 034747000

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use extinguishing media suitable for surrounding fire situation.

Hazards from Combustion Products Reagent: Decomposes on heating emitting oxides of carbon.

Hazards from Combustion Products Buffer: Decomposes on heating emitting oxides of carbon, oxides of nitrogen and minor quantities of noxious smoke.

Precautions for Fire Fighters and Special Protective Equipment: If safe to do so, move undamaged containers from fire area. Fire fighters to wear Self-contained breathing apparatus (SCBA) in confined spaces, in oxygen deficient atmospheres or if exposed to products of decomposition. Full protective clothing is also recommended.

Hazchem Code: None allocated.

Flammability: This material is not a combustible or flammable solid. However, under certain conditions and if sufficiently distributed in air and a suitable source of ignition is present, then a dust explosion may occur.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures
Reagent: Avoid generating dusts. Wear suitable protective equipment. Ventilate area. If possible wet area down to prevent high dust levels.
Buffer: Keep unnecessary people away. Isolate hazard area and deny entry. If product spills onto floors it will represent a slip hazard, walk cautiously. Wear protective equipment to prevent skin and eye contact, as outlined under personal protection in this MSDS.

Methods and Materials for Containment and Cleanup Procedures
Reagent: If available, use dustless methods, such as a HEPA vacuum and filter. Otherwise, use a non-sparking shovel and place into a suitably labeled container for later disposal. Do not dry sweep.
Buffer: Dike area using with an absorbent such as diatomaceous earth - to prevent run off into drains and waterways. Throw further absorbent (diatomaceous earth or other inert material) on top of spill, then shovel up and seal in properly labeled containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling
Reagent: Avoid generating dusts
Buffer: Provide adequate ventilation. Avoid generating vapours.

Conditions for Safe Storage
Store in a cool place and out of direct sunlight. Store away from oxidizing agents. Keep containers closed, when not using the product. When stored at 2 - 8°C the reagent will be stable until the expiry date on the bottle and kit box labels. Store in original packaging as approved by manufacturer.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards
No exposure standards have been assigned by [NOHSC] for this product or any of the components.

Engineering Controls
Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate.
Personal Protection Equipment
Gloves: Not normally required, however, for people with sensitive skins the use of neoprene or nitrile is recommended.
Eyes: Chemical glasses or face shield to protect eyes.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection Reagent: Avoid breathing of dusts. Select and use respirators in accordance with AS/NZS 1715/1716. The use of a dust mask is recommended. For higher concentrations (for example in extremely dusty environments) use a half-face respirator fitted with a P1 filter. Filter capacity and respirator type depends on exposure levels and type of contaminant. If entering spaces where the airborne concentration of a contaminant is unknown then the use of a Self-contained breathing apparatus (SCBA) with positive pressure air supply complying with AS/NZS 1715 / 1716, or any other acceptable International Standard is recommended. Select and use respirators in accordance with AS/NZS 1715/1716.
Respiratory Protection Buffer: Avoid breathing of vapours. The use of a respirator is not normally required, however, if entering spaces where the airborne concentration of a contaminant is unknown then the use of a Self-contained breathing apparatus (SCBA) with positive pressure air supply complying with AS/NZS 1715 / 1716, or any other acceptable International Standard is recommended. Select and use respirators in accordance with AS/NZS 1715/1716.

9. PHYSICAL AND CHEMICAL PROPERTIES

	Reagent	**Buffer**
Appearance:	White powder with no odour	Colourless liquid with a mild odour
Boiling Point:	Not available	Not available
Freezing Point:	Not available	Not available
Vapour Pressure:	Not available	Not available
Specific Gravity:	Not available	Not available
Flash Point:	Not applicable	Not applicable
Flammability Limits:	Not applicable	Not applicable
Solubility in Water:	Completely miscible	Completely soluble
Other Properties		
pH:	6.75 ± 0.1 @ 19 - 22°C (at use concentrations)	7.20 ± 0.2 @ 19 - 22°C
Vapor Density (Air = 1):	Not applicable	Not available
Evaporation Rate (BuAc = 1):	Not applicable	Not available
Volatile Organic Compounds:	Not applicable	Not available

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of use.

Conditions to Avoid: Generation of high dust levels and vapours.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products Reagent: Decomposes on heating emitting oxides of carbon.
Hazardous Decomposition Products Buffer: Decomposes on heating emitting oxides of carbon, oxides of nitrogen and minor quantities of noxious smoke.

Hazardous Reactions: Will not occur.

11. TOXICOLOGICAL INFORMATION

There is no toxicological information available for this product, the following is expected:
Oral LD50(rat): > 5,000 mg/kg
Dermal LD50(rabbit): > 5,000 mg/kg

Acute Health Effects Reagent
Swallowed: May cause irritation to mouth, throat and stomach, which may lead to nausea, vomiting and diarrhoea.

Eye: May cause mild irritation to the eyes, with effects including: tearing, pain, stinging and blurred vision. These effects are anticipated to be of a short acting nature and no long term injury is envisaged.

Skin: May cause mild irritation to the skin.

Inhaled: May cause irritation to the mouth, throat and upper respiratory system.

11. TOXICOLOGICAL INFORMATION

Chronic: Prolonged or repeated inhalation of the dust may cause sneezing, coughing and mucous buildup.

Acute Health Effects Buffer
Swallowed: Drinking large quantities of this product, may cause irritation to mouth, throat and stomach with effects including mucous build up, irritation to the tongue and lips and pains in the stomach, which may lead to nausea, vomiting and diarrhoea.

Eye: May cause mild irritation to the eyes, with effects including: tearing and blurred vision. These effects are anticipated to be of a short acting nature and no long term injury is envisaged.

Skin: May cause mild irritation to the skin.

Inhaled: If the product is heated, the vapours generated from this product may cause irritation to the mouth, throat and upper respiratory system.

Chronic: Prolonged or repeated skin exposure may cause dermatitis in some susceptible individuals.

12. ECOLOGICAL INFORMATION

No ecological information available for this product. Do not dispose of large quantities to waterways, drains or sewers.

13. DISPOSAL CONSIDERATIONS

Refer to appropriate authority in your State. Normally suitable for disposal by approved waste disposal agent.

14. TRANSPORT INFORMATION

UN Number: None allocated.

Proper Shipping Name: NONE ALLOCATED.

Dangerous Goods Class: None allocated.

Subsidiary risk: None allocated.

Packing Group: None allocated.

Hazchem Code: None allocated.

Road and Rail Transport:
Not classified as a Dangerous Good according to the United Nations Recommendations for the Transport of Dangerous Goods and Globally Harmonized System for the Classification and Labeling of Chemicals.

Air Transport:
Not classified as a Dangerous Good according to the International Civil Aviation Organization (ICAO) and International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Marine Transport:
Not classified as a Dangerous Good according to the International Maritime Organization Rules (Maritime Dangerous Goods Code - IMDG Code) for transport by sea.

15. REGULATORY INFORMATION

Poison Schedule: None allocated [Aust].

Inventory Status:

Australia (AICS)	Y
United States (TSCA)	Y
Canada (DSL)	Y
Europe (EINECS/ELINCS)	Y

Y = all ingredients are on the inventory.

16. OTHER INFORMATION

Issue date: June, 2005.

Reasons for Update

1. Alignment with the 2nd Edition of National Code of Practice for the Preparation of Material Safety Data Sheets [NOHSC:2001(2003).
2. Changes and /or addition made to all sections.

Key Legend Information

NOHSC - National Occupational Health & Safety Commission [Aust]
SUSDP - Standard for the Uniform Scheduling of Drugs and Poisons {Poison Schedule} [Aust]
TWA - Time Weighted Average [Int]
STEL - Short Term Exposure Limit [Int]
AICS - Australian Inventory of Chemical Substances [Aust]
EPA - Environmental Protection Agency [Int]
NIOSH - National Institute for Occupational Safety and Health [US]
AS/NZS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. [Aust]
AS/NZS 1716 - Respiratory Protective Devices. [Aust]
Hazchem Code - Fire Fighter Designation [Aust]
IATA - International Aviation Transport Authority [Int]
ICAO - International Civil Aviation Organization [Int]
IMO - International Maritime Organisation. [Int]
IMDG - International Maritime Dangerous Goods [Int]
United Nations Recommendations for the Transport of Dangerous Goods and Globally Harmonized System for the Classification and Labeling of Chemicals. [Int]
EU - European Union
TSCA - Toxic Substances Control Act [US]
DSL - Domestic Chemical List [Can]
EINECS - European Inventory of Existing Commercial Chemical Substances [Int]
ELINCS - Existing List of Notified Chemical Substances. [Int]

[Aust] = Australia
[Int] = International
[US] = United States of America
[Can] = Canada

Principal References

Information supplied by manufacturer, reference sources including the public domain.

Disclaimer

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.
Our responsibility for products sold is subject to our standard terms and conditions which are available on request.

END OF MSDS