

Material Safety Data Sheet

Alkaline Phosphatase

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Alkaline Phosphatase

Catalog Numbers: TR11003, TR11015, BU1101-BP, UV1101xxxx-BP, VC1101xxxx, VT1101xxxx

Use: This reagent is intended for the in vitro quantitative determination of ALP (Orthophosphoric - Monoester Phosphohydrolase, Alkaline Optimum, EC 3.1.3.1), in human serum or plasma on both manual and automated systems.

THERMO ELECTRON
189 - 199 Browns Rd
NOBLE PARK VIC 3174
AUSTRALIA

Tel: +61 3 9790 4100

Fax: +61 3 9790 4155

E-mail: info.clinicalchemistry@thermo.com

Contact Point

Australia

Quality Assurance Manager:

Tel: +61 3 9790 4100

Mon – Fri 9:00am to 5:00pm

THERMO ELECTRON

171 Industry Drive
Pittsburgh, PA, 15275

U.S.A

Tel: (800) 558 9115

Fax: (412) 788 6833

E-mail: info.clinicalchemistry@thermo.com

U.S.A

Chemtel

24 Hour Emergency Assistance

1-800-255-3924

813-248-0585

2. HAZARD IDENTIFICATION

Classified as hazardous according to the ASCC/NOHSC/EU criteria

Hazard Classification: HAZARDOUS SUBSTANCE, NON DANGEROUS GOODS.

Hazard Category: Irritant

RISK PHRASES

R36 Irritating to eyes

SAFETY PHRASES

S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Poison Schedule: None allocated [Aust].

3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME	Proportion	CAS Number
SODIUM CARBONATE	10 to 30 %	497-19-8
FILLERS, ADDITIVE NON HAZARDOUS INGREDIENTS	Balance	Mixture

All other ingredients in this product are not hazardous according to the ASCC/NOHSC/EU criteria.

4. FIRST AID MEASURES

Swallowed: If swallowed, **DO NOT induce vomiting**. If victim is conscious give 1 to 2 glasses of water to drink. If irritation persists transport to hospital or doctor.

Eye: If material is splashed into eyes, immediately, flush with plenty of water for 15 minutes, ensuring eye lids are held open. If irritation persists transport to hospital or doctor.

Skin: If material is splashed onto 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.

In case of poisoning, contact Poisons Information Centre

In Australia call Tel: 131126

In New Zealand Tel: 034747000

Material Safety Data Sheet

Alkaline Phosphatase

5. FIRE-FIGHTING MEASURES

Fire/Explosion Hazard

If safe to do so, move undamaged containers from fire area.

Hazardous Decomposition Products: Decomposes on heating emitting oxides of carbon and oxides of nitrogen.

Fire Fighting Procedures: 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.

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

Hazchem Code: None allocated

Flammability

This material is not a flammable or combustible solid.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures:

Avoid generating dusts. Ventilate area. If possible wet area down to prevent high dust levels. Wear protective equipment to prevent skin and eye contact, as outlined under personal protection in this MSDS.

Methods and Materials for Containment and Clean Up Procedures:

Throw diatomaceous earth or other inert material onto spill, then shovel up with non-sparking shovel and seal in properly labeled containers for disposal. If available, use dustless methods, such as a HEPA vacuum and filter.

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Do not swallow. Provide adequate ventilation. Avoid generating dusts.

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. Store at 2-8°C and the reagent will be stable until the expiry date stated 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 are available for this product, however, the following exposure standards have been assigned by the National Occupational Health & Safety Commission (NOHSC) to the following component of the product:

SODIUM CARBONATE

(Worksafe Australia)

[TWA] 10 mg/m³

Notices: H

Engineering Controls

Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate.

Personal Protection Equipment

GLOVES: Not normally required, however, if product has spilt, or package is broken, then the use of natural rubber gloves is recommended.

EYES: Chemical goggles or glasses to protect eyes.

RESPIRATORY PROTECTION: 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.

Material Safety Data Sheet

Alkaline Phosphatase

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White to off white powder with no odour.
Boiling Point:	Not available.
Freezing Point:	Not available.
Vapour Pressure:	Not available.
Specific Gravity:	Not available.
Flash Point:	Not applicable.
Flammability Limits:	Not applicable.
Solubility in Water:	Completely miscible.

Other Properties

pH: 10.30 ± 0.1 @ 19 - 22°C (at use concentrations)

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of use.

Conditions to Avoid: Incompatibles.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Decomposes on heating emitting oxides of carbon and oxides of nitrogen.

Hazardous Reactions: Will not occur.

11. TOXICOLOGICAL INFORMATION

There is no toxicological information available for this product.

ACUTE HEALTH EFFECTS

Swallowed: Swallowing of large quantities may result in nausea, vomiting and diarrhoea.

Eye: Will cause irritation to the eyes, with effects including: tearing, pain, stinging and blurred vision. If the product is not removed promptly corneal injury may occur.

Skin: May cause mild irritation to the skin.

Inhaled: May cause irritation to the nose, throat and respiratory system. However, this is only anticipated to occur if the product is heated.

Chronic: Prolonged or repeated skin contact may lead to possible dermatitis in some susceptible individuals.

No ecological information available for this product.

Ecotoxicity: No information for product.

Mobility: No information for product.

Persistence / Degradability: No information for product.

Chemical Fate Information: No information available.

Do not dispose of large quantities to waterways, drains or sewers.

13. DISPOSAL CONSIDERATIONS

Methods of Disposal:

Refer to appropriate authority in your State. Dispose of material through a licensed waste contractor.

Packaging:

Containers of this material may retain product residues. Handle contaminated packaging in the same way as the substance itself, by disposing in accordance with all applicable federal, state and local environmental and hazardous waste regulations.

Material Safety Data Sheet

Alkaline Phosphatase

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

Label: 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 labelling 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.

If approved for European Communities use, this product is regulated under the In Vitro Diagnostic Medical Devices Directive (98/79/EC).

16. OTHER INFORMATION

Issue date: September, 2006

Key Legend Information:

NOHSC - National Occupational Health & Safety Commission {Formerly Worksafe}[Aust]

ASCC - Australian Safety and Compensation Council [Aust]

SUSDP - Standard for the Uniform Scheduling of Drugs and Poisons [Aust]

TWA - Time Weighted Average [Int]

STEL - Short Term Exposure Limit [Int]

AICS - Australian Inventory of Chemical Substances

Dangerous Goods - Initial Emergency Response Guide (SAA/SNZ HB76:1997) [Aust]

EPA - Environmental Protection Agency [Int]

NIOSH - National Institute for Occupational Safety and Health [US]

TSCA - Toxic Substances Control Act [US]

OSHA - Occupational Safety and Health Administration [US]

AS/NZS 1715 - Selection, use and maintenance of respiratory protective devices. [Aust/NZ]

AS/NZS 1716 - Respiratory protective devices. [Aust/NZ]

Hazchem Code - Fire fighters designation [Aust]

IATA - International Aviation Transport Authority [Int]

ICAO - International Civil Aviation Organization [Int]

Material Safety Data Sheet

Alkaline Phosphatase

16. OTHER INFORMATION

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 labelling of Chemicals. [Int]

EINECS - European Inventory of Existing Commercial Chemical Substances. [Int]

ELINCS - European List of Notified Chemical Substances. [Int]

EU - European Union [Int]

EU Directives: The classification criteria used, are adopted from the European Community's (EC) legislation for classifying dangerous substances. The criteria are taken from:

EC Council Directive 67/548/EEC

EC Council Directive 1999/45/EC

[Aust/NZ] = Australian New Zealand

[Int] = International

[US] = United States of America

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 available on the product and the measures to be used to handle and use the product safely. Each user should read this MSDS and consider the information in connection with the way the product is intended to be handled or used. Responsibilities of the supplier associated with this product are outlined in our standard terms and conditions, a copy of which is sent to customers and is available on request.

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END OF MSDS