

Material Safety Data Sheet

Aspartate aminotransferase (AST/GOT) – Liquizyme (4+1)
E.C.2.6.1.1.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Aspartate aminotransferase (AST/GOT) – Liquizyme (4+1)
E.C.2.6.1.1.

Catalog Numbers: 291 000, 291 001, 291 002, 291 003, 291 004, 291 005, 291 006,
291 007, 291 008, 291 009

Use: Spectrum Diagnostics liquizyme AST reagent is intended for the in- vitro quantitative, diagnostic determination of AST in human serum on both automated and manual systems.

Contact Point

Egypt

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2. HAZARD IDENTIFICATION

Not Classified as hazardous according to the EU criteria for lab doctors only.

Hazard Classification: HAZARDOUS SUBSTANCE, NON DANGEROUS GOODS.

Hazard Category: Irritant.

RISK PHRASES:

R36/38 Irritating to eyes and skin.

SAFETY PHRASES:

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

S37/39 wear suitable gloves and eye/face protection.

Poison Schedule: (CH):2.

3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME	Proportion	CAS Number
Reagent 1 (R1)		
Tris buffer	80 mmol/L	77-86-1
L- Aspartate	240 mmol/L	56-84-8
MDH	>450 U/L	9001-64-3

LDH	>1200 U/L	9001-60-9
Sodium Hydroxide	220 mmol/L	1310-73-2
Sodium Azide	8 mmol/L	26628-22-8
Reagent 2 (R2)		
NADH	>0.18 mmol/L	606-68-8
2-Oxoglutarate	18 mmol/L	305-72-6
Sodium Azide	8 mmol/L	26628-22-8

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

4. FIRST AID MEASURES

Swallowed:

If swallowed, and if more than 15 minutes from a hospital, **induce vomiting**, preferably using Ipecac Syrup APF.

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.

5. FIRE-FIGHTING MEASURES

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

Hazards From Combustion Products: Decomposes on heating emitting elemental oxides, oxides of nitrogen and chlorine entities.

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.

Hazchem Code: None allocated.

Flammability: This material is not a flammable or combustible liquid.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

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

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

Provide adequate ventilation. Avoid generating vapours.

Conditions for Safe Storage

Store in a cool place and out of direct sunlight. Store away from sources of heat or ignition. 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. No other measures are required for this product.

Personal Protection Equipment

Gloves: Not normally required, however, if handling large quantities the use of natural rubber is recommended.

Eyes: Chemical glasses or face shield for spills.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

	Reagent 1	Reagent 2
Appearance	Colorless liquid with mild odour	Colorless liquid with mild odour
Solubility in water	Completely soluble	Completely soluble

Other properties

pH	Not available	Not available
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10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of use.

Conditions to Avoid: Generation of vapours.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Decomposes on heating emitting indeterminate decomposition products.

Hazardous Reactions: Will not occur.

11. TOXICOLOGICAL INFORMATION

There is no toxicological information available for this product

Acute Health Effects

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 diarrhea.

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. Not anticipated to be absorbed through the skin.

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

Chronic: Prolonged or repeated skin exposure may cause skin rashes 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

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.OTHER INFORMATION

Principal References

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

Disclaimer

This MSDS summarizes 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