Coral Clinical Systems
A Division of Tulip Diagnostics (P) Ltd.
Verna, Goa – 403 722, INDIA

Safety Data Sheet

1. INFORMATION ON THE SUBSTANCE / PREPARATION AND COMPANY

1.1 Product Name : **Calkine SGPT (ALAT) Kit (Mod. IFCC method)**

Kit	Catalog No.	Components
Calkine SGPT (ALAT) Kit (Mod. IFCC method)	1104090425,1104092150,1104090025	L1: Enzyme Reagent L2: Starter Reagent C- Bovine Serum Control

1.2 Intended Use : For the determination of SGPT (ALAT) activity in serum.

1.3 Company : **Coral Clinical Systems**

(A Division of Tulip Diagnostics (Pvt) Ltd.)
Plot No. M-46 & M-47, Building E,
Phase III B, Verna Industrial Estate,
Verna-Goa, 403722
Tel :- +91-832-6680121
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E-mail :- coral@tulipgroup.com

1.4 In emergencies Call your local emergency center.

2. Composition / Information on Hazardous Ingredients

Chemical Name	CAS #	% W/V	Exposure Limits in Air				
			ACGIH		OSHA		OTHER
			TLV	STEL	PEL	STEL	
Reagent 1: Enzyme Reagent							
NA	NA	NA	NA	NA	NA	NA	NA
Reagent 2: Starter Reagent							
Potassium hydroxide	1310-58-3	1.6%	C 2 mg/m^3	NA	C 2 mg/m^3	N / A	N / A
Control							
NA	NA	NA	NA	NA	NA	NA	NA

3.Hazard Identification

According to 1999/45/EC, the preparation is classified as hazardous substance or mixture.
Skin Irritation,category 2; H315
Eye Irritation,Category 2;H319

Other Information
The reagents contain materials from animal origin i.e BSA (Bovine). The BSA used is derived from non -BSE country. The concerned certificate is available .

4.First Aid Measures

Inhalation:
If breathing becomes difficult, remove victim to fresh air. Seek medical attention immediately.

Ingestion:
Do not induce vomiting. If vomiting occurs, lean victim forward to prevent breathing in vomitus. Give a cup of water to dilute chemical in stomach. If vomiting occurs, give another cup of water after vomiting. Do not give anything to an unconscious person. Seek medical attention immediately.

Skin Contact:
Avoid skin contact. If skin contact occurs, remove contaminated clothing and wash exposed skin with plenty of water for atleast 15 minutes. Get medical attention immediately.

Eye Contact:
Immediately flush eye(s) with large volume of water for atleast 15 minutes, occasionally lifting the lower lids. Get medical attention immediately.

5.Fire Fighting Measures

Flash Point (Method used): NA **Flammable Limits – LEL:** NA **UEL:** NA

Extinguishing Media:
Use fire extinguishing media appropriate for site conditions.

Special Fire Procedures:
Firefighters should wear proper protective equipment and self contained breathing apparatus with full facepiece operated in positive mode. Move containers from fire area if it can be done without risk. Use water to keep fire exposed containers cool. Do not get water inside containers.

Unusual Fire and Explosion Hazards:
Sodium azide: can react with copper, lead, brass, or solder in plumbing to form explosive compound of Lead Azide and Copper Azide. Sodium Azide can react with acids to form explosive hydrogen Azide. **Hydrochloric Acid**: may emit Hydrogen gas upon contact with metal.

6.Accidental Release Measures

Steps to be taken in case material is Released or Spilled:
PPE should be level D: lab gloves, chemical resistant apron, boots and splash goggles. Use an absorbent material to contain / pick up the spilled solution. Place all spill residue into a suitable container, seal, label and hold for disposal.

7.Handling and Storage
Refer to packet insert for additional information on handling and storage procedures.

8.Exposure Controls and Personal Protection

Ventilation Data:
A system of local and / or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source.

Respiratory Protection:
Respiratory protection is not required under normal use of this product. If respiratory protection is needed, follow OSHA respirator regulations (29CFR1910.134) and, if necessary, wear a NIOSH approved respirator. Select respirator based on its suitability to provide worker protection for given working conditions, level of airborne concentration, and presence of sufficient oxygen.

Protective Gloves:
Wear appropriate protective gloves to prevent skin contact. Replace torn or punctured gloves promptly.

Other Protective Equipment:
Wear appropriate eye protection to prevent eye contact. Wear appropriate body protection to prevent skin contact.

Other Engineering Controls:
Eye wash stations and deluge showers.

Work Practices:
Good laboratory technique should be used when handling this product. Observe appropriate chemical hygiene. Avoid contact with eyes or skin. Do not place in mouth.

Hygienic Practices:
Do not eat, drink, or smoke while working with product. Upon completion of work activities involving this product, wash hands thoroughly with soap and water.

9.Physical And Chemical Properties

L1: Enzyme Reagent

Relative Vapour density(air = 1)	: NA	Evaporation rate(nBuAc = 1)	: NA
Specific Gravity (water = 1)	: NA	Freezing / Melting Point	: NA
Solubility in Water	:Soluble	Boiling Point	: NA
Vapour Pressure, mm Hg @ 20^0C	: NA	pH	: 7.5 $\pm$ 0.1

L2: Starter Reagent

Relative Vapour density(air = 1)	: NA	Evaporation rate(nBuAc = 1):	NA
Specific Gravity (water = 1)	: NA	Freezing / Melting Point	: NA
Solubility in Water	: Soluble	Boiling Point	: NA
Vapour Pressure, mm Hg @ 20^0C:	NA	pH	: 9.6-9.8

C-Bovine Serum Control

Relative Vapour density(air = 1)	: NA	Evaporation rate(nBuAc = 1):	NA
Specific Gravity (water = 1)	: NA	Freezing / Melting Point	: NA
Solubility in Water	: Soluble	Boiling Point	: NA
Vapour Pressure, mm Hg @ 20^oC	: NA	pH	: NA

Odour and Appearance Information
Reagent 1: Clear, Colourless solution

Reagent 2: Clear, Colourless solution

Reagent 3: Lyophilized powder

10.Stability and Reactivity

Incompatibility (Materials to Avoid):
Sodium Azide: Strong bases, strong acids, metals, strong oxidizers and water reactive materials. **Hydrochloric Acid**: Metals, Metal oxides, Amines, Acetic Anhydride, and Carbonates. **Potassium Hydroxide**: Metals, Organohalogen compounds, flammable liquids, and nitrous compounds.

Hazardous Decomposition Products:
Sodium Azide: May generate toxic products. **Hydrochloric Acid**: Hydrogen gas, Hydrogen chloride, Chlorine.

Will Hazardous Polymerization Occur?
Hazardous polymerization will not occur.

Conditions to Avoid / Polymerization: NA
Is the Product Stable?
Yes, under normal handling and storage conditions.

Conditions to Avoid/stability
Sodium Azide: Avoid acidification of solution, which may generate hydrogen cyanide gas. **Hydrochloric Acid**: Heat and moisture.

11.Toxicological Information

Toxicity Data:
Sodium Azide (Undiluted): LD50 (rat and mouse, oral)=27mg/kg; LD50 (rabbit, skin)=20mg/kg.
Hydrochloric acid: eye irritancy (rabbit)-1% solution/20sec., comeal scarring; Eye irritancy (rabbit)= 5mg/30sec, mild; eye irritancy (rabbit)=100mg/rinse, mild; skin irritancy(rabbit)=0.5ml/17% solution/4hours, corrosive burns. **Sodium hydroxide:** is considered a severe skin and eye irritant based on irritation data: skin, rabbit 500 mg / 24 hours; eye, rabbit 50 micrograms/24 hours.

Reproductive effects:
NA.

Target organ Effects:
Sodium Azide: Eyes, Skin, central nervous systems, cardiovascular systems. **Hydrochloric Acid**: Eyes, Skin and Respiratory system. **Potassium Hydroxide**: Eyes, Skin and Respiratory system.

Carcinogenicity: No

CHEMICAL NAME	CAS #	% W/V	NTP Carcinogen		IARC	OSHA
			Known	Anticipated		
NA.	NA.	NA.	NA.	NA.	NA.	NA.

12.Ecological Information

Environmental Fate / Stability:NA

Effect of Material on plants or animals:NA

Effect of Chemical on Aquatic Life:NA

13.Disposal Considerations

EPA Waste Number and Proper Waste Disposal Method:
Please consult local, state and federal regulations for additional guidance on disposal.

14.Transportation Information

Is this Material Hazardous? Not regulated under transportation regulations.

Proper Shipping Name : NA		
Hazard Class Number : NA	Packing Group: NA	UN Number: NA

15.Regulatory Information NA.

16.Other Information

Hazard Statement and Precautionary statements referred elsewhere in the safety data sheet:

H315 - Causes skin irritation.

H319 -Causes serious eye irritation.

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text. It remains the user's own responsibility to make sure that the information is appropriate and complete for his specific use of this product. The user is also responsible for observing any laws and applicable guidelines.

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