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 : **Creatinine Kit (Alkaline Picrate method)**

Kit	Catalog No.	Components
Creatinine Kit (Alkaline Picrate method)	1101060015 / 1101060035 / 1101060070/ 1101060010/1123100040	L1- Picric Acid Reagent L2- Buffer Reagent S - Creatinine standard

1.2 Intended Use : For the determination of Creatinine in serum and urine.

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
Fax :- +91-832-2887028
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: Picric Acid Reagent

NA							

Reagent 2: Buffer Reagent

Sodium Hydroxide	1310-73-2	5.2%	N / A	2 mg/m^{3}C	2 mg/m^3	N / A	NIOSH IDLH 10 mg/m^3

Standard

NA							

3.Hazard Identification

According to 1999/45/EC, the preparation is classified as hazardous substance or mixture.
Skin Corrosion,category 1A; H314

Other Information

The reagents do not contain materials from animal origin

4.First Aid Measures

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

Ingestion:
Do not induce vomiting. Get medical attention immediately. Do not give anything by mouth to an unconscious person.

Skin Contact:
Avoid skin contact. If skin contact occurs, remove contaminated clothing and wash exposed skin with 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:
Structural firefighting gear and self-contained breathing apparatus will provide adequate protection if this product is in a fire area.

Unusual Fire and Explosion Hazards:
Sodium hydroxide : adding water to caustic solution generates large amount of heat. Picric acid : explosive decomposition is likely if material is involved in a fire

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. Sweep up spilled product. 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 - Picric Acid 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	:	NA

L2 - Buffer 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	:	NA

S- Creatinine standard

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	:	NA

Odour and Appearance Information
Reagent 1: Clear Yellowish solution

Reagent 2: Clear, Colourless solution

Reagent 3: Clear, Colourless solution

10.Stability and Reactivity

Incompatibility (Materials to Avoid):
Sodium hydroxide : water, acid, flammable liquids, and metals (eg. Aluminium, tin , zinc). Picric acid: metals – copper, lead, zinc, aluminium + water, ammonia, concrete, plaster, salts, oxidizers.

Hazardous Decomposition Products:
Sodium hydroxide: reacts with acid and is corrosive in moist air to metals (e.g. Zinc, tin, lead) to form combustible hydrogen gas. Picric acid : explosive decomposition is likely if material is involved in a fire.

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:
Heat, moisture, incompatibles. Picric acid: dangerous explosion hazard when dry. Becomes increasingly shock, heat, and friction sensitive as it loses its moisture.

11.Toxicological Information

Toxicity Data:
Sodium hydroxide is considered a severe skin and eye irritant based on irritation data: skin, rabbit 500 mg / 24 hours ; eye, rabbit 5 micrograms/24 hours.
Picric acid: LD50 (rat, oral)= 200 mg/kg. Investigated as mutagen.

Reproductive effects:
NA.
Target organ Effects:
Picric acid : eyes, skin, kidneys, liver, blood. Sodium hydroxide: skin, eyes, respiratory tract.

Carcinogenicity: No

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

12.Ecological Information

Environmental Fate / Stability:
The sodium hydroxide solution may be hazardous to the environment, special attention should be given to water organisms.

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:
H314 -Causes severe skin burns and eye damage.

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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