Coral | Clinical Systems

Plot No. M – 46, Phase III B, Verna Ind. Estate,
Verna, Goa – 403 722, INDIA
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Material Safety Data Sheet

1.Product Identification

Product Name : **Bilirubin Kit (Mod. Jendrassik & Grof's Method)**

Catalog Number : BIL 010 / BIL 011 / BIL 012

2.Composition / Information on Hazardous Ingredients

Chemical Name	CAS #	% W/V	Exposure Limits in Air				
			ACGIH		OSHA		OTHER
			TLV	STEL	PEL	STEL	

Reagent 1: Direct Bilirubin Reagent

Hydrochloric acid	7647-01-0	2.7%	N/A	5 ppm C	N/A	5ppm C	NIOSH REL 5ppm C

Reagent 2: N/A

Reagent 3: Total Bilirubin Reagent

Hydrochloric acid	7647-01-0	1.3%	N/A	5 ppm C	N/A	5ppm C	NIOSH REL 5ppm C

Reagent 4: N/A

Reagent 5: N/A

3.Hazard Identification

Primary Routes of Entry:
Inhalations, Ingestion, skin and / or eye contact.

Inhalation:
Inhalation of Vapours can cause coughing, choking, inflammation of the nose, throat, and upper respiratory tract, and in severe cases, pulmonary edema, circulatory failure, and death.

Ingestion:
Swallowing hydrochloric acid can cause immediate pain and burns of the mouth, throat, esophagus and gastrointestinal tract. May cause nausea, vomiting, and diarrhea, and in severe cases, death.

Skin Contact:
Can cause redness and pain.

Eye Contact:
If the liquid or Vapours of this product come in contact with the eyes, can damage the eyes.

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Chronic Exposure:
N/A

Medical Conditions Aggravated by Exposure:
Persons with pre-existing skin disorders or eye problems or impaired respiratory function may be more susceptible to the effects of the substance.

Health Effects:
The vapours or liquid can rapidly injure exposed tissue, cause skin and eye damage, and irritate mucous membranes and the respiratory tract. Health hazards given on this data sheet apply to concentrated solutions of hydrochloric acid. Hazards of dilute solutions may be reduced, depending upon the concentration.

4.First Aid Measures

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

Ingestion:
If swallowed, do not induce vomiting. Give large amounts of water. Get medical attention immediately.

Skin Contact:
Avoid skin contact. If skin contact occurs, remove contaminated clothing and wash exposed skin with water. Get medical attention.

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): N/A **Flammable Limits – LEL:** N/A **UEL:** N/A

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:
This solution is corrosive and presents a severe contact hazard to firefighters. If this product contacts metals, flammable hydrogen gas may be released.

6.Accidental Release Measures

Steps to be taken in case material is Released or Spilled:
Wear appropriate personal protective clothing. Neutralize with alkaline material, the absorb with an inert material (e.g. dry sand, earth). Place all contaminated disposables into a suitable container, seal, label, and 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.

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.

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Protective Gloves:
Wear appropriate protective gloves to prevent skin contact.

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

For All Components Unless Otherwise Indicated

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

Odour and Appearance Information
Reagent 1: Clear, Colourless liquid

Reagent 2: N/A.

Reagent 3: Clear, Colourless liquid

Reagent 4: N/A.

Reagent 5: N/A.

10.Stability and Reactivity

Incompatibility (Materials to Avoid):
Incompatible with materials such as cyanides, sulfides, sulfites, and formaldehyde.
Hazardous Decomposition Products:
When heated to decomposition, emits toxic and corrosive fumes.
Will Hazardous Polymerization Occur?
Hazardous polymerization will not occur.

Conditions to Avoid / Polymerization: N/A
Is the Product Stable?
Yes, under normal handling and storage conditions.
Conditions to Avoid/stability
Excess heat, flame, or pressure.

11.Toxicological Information

Toxicity Data:
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.

Reproductive effects:
N/A.
Target organ Effects:
Eyes and skin.

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Carcinogenicity: No

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

12.Ecological Information

Environmental Fate / Stability:
If concentrated Hydrochloric acid is released to the soil, it is not expected to biodegrade and may leach into ground water
Effect of Material on plants or animals:
N/A
Effect of Chemical on Aquatic Life:
N/A

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 : N/A		
Hazard Class Number : N/A	Packing Group: N/A	UN Number: N/A

15.Regulatory Information

NA.

16.Other Information

NA => NOT APPLICABLE or NO INFORMATION