



## RICA MARKETING SDN. BHD.

### CHEMICAL SAFETY DATA SHEET

#### SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

##### 1.1 Product Details

Trade Name : **Tri-Mate 8370**  
Chemical Name : **Zinc chromating chemicals**  
Chemical Formula : **Proprietary**  
Molar Mass : **NA**  
Chemical Family : **NA**  
Manufacturer's Code : **NIL**  
Use : **Industrial**

##### 1.2 Company Identification

Manufacturer's Name and Address : **Rica Marketing Sdn. Bhd.**  
**7, Jalan Taming 3, Taman Taming Jaya**  
**Off Jalan Balakong, 43300 Selangor,**  
**Malaysia**  
E-Mail : **rica@po.jaring.my**  
Telephone Number : **03-8961 4950**  
Emergency Telephone Number : **03-8961 4950**

##### 1.3 Contact Point / Persons

Designation : **Laboratory**  
Tel. No : **03-89614950**  
  
Person in-charge : **Mr S.H. Chia**  
**Mr Micheal Cheah**  
Tel. No : **03-8961 4950**

#### SECTION 2: COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

<u>Chemical Name</u>	<u>CAS no.</u>	<u>Proportion</u>	<u>Exposure Limit</u>	<u>Toxicity Data TLV</u>
Chromium Nitrate Cr (NO <sub>3</sub> ) <sub>3</sub> 9H <sub>2</sub> O	7789-02-8	less than 60%	ACGIH: TWA 0.5mg Cr/m <sup>3</sup>	N/A
Cobalt Nitrate	10141-05-6	less than 5%	LD <sub>50</sub> :691mg/kg (oral mouse)	

**SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES**  
=====

Appearance	: Dark bluish green liquid
Odour	: NA
Solubility at 28°C	: Mixable with water in all proportions
Boiling Point	: More than 100°C
Melting Point (°C)	: NA
Vapour Pressure (mm of Hg at 25°C)	: NA
Percentage Volatiles	: NA
Evaporation Rate	: NA
Vapour Density	: NA
Specific Gravity at 28°C	: 1.165 – 1.190
Flash Point	: NA
Auto-ignition Temperature	: NA
Flammable limit (%)	: NA
Other properties if applicable	: ---

**SECTION 4: HAZARD IDENTIFICATION**  
=====

Most important hazards: Corrosive, Oxidising

**SECTION 5: FIRST AID MEASURES**  
=====

Inhalation	: Remove to fresh air area with well ventilation
Eye contact	: Immediately flush with large amounts of water for at least 15 min while holding eyelids apart. Washing within 5 min is essential for maximum effectiveness. Call a physician immediately.
Skin contact	: Wash affected area thoroughly with water. Remove contaminated clothing and launder before reuse. If irritation develops, get medical attention.
Ingestion	: Never give anything by mouth to an unconscious person. Induce vomiting immediately by giving two glasses of water and sticking finger to throat. Call a physician immediately.
Notes to physician	: May aggravate allergies, dermatitis and sinus disease on prolonged exposure

**SECTION 6: FIRE FIGHTING MEASURES**  
=====

Extinguishing Media	: Use water spray, foam, dry chemical or carbon dioxide
Fire Fighting instruction	: Wear proper protective equipment and SCBA with full face piece operating in positive pressure mode. Move bags / containers from fire area if it can be done without risk. Cool containers with water.
Special hazards	: During a fire, irritating and highly toxic gases may be generated so that if possible, move container from fire areas if it can be done

**SECTION 7: ACCIDENTAL RELEASE MEASURE**  
=====

**Leak / Spill:** Evacuate area. Wear rubber boots, rubber gloves and rubber protective clothing and goggles. Neutralize with alkali to pH 6- 8. Wash with plenty clean water.

**SECTION 8: HANDLING AND STORAGE**  
=====

**Handling** : Wear rubber gloves and other protective clothing  
**Storage** : Keep away from strong alkali and other oxidizing chemicals. Store in a Cool dry place with good ventilation. Keep away from food.

**SECTION 9: EXPOSURE CONTROL AND PERSONAL PROTECTION**  
=====

- a. **Exposure limit** : ACGIH: TWA 0.5 mg (Cr) / m3
- b. **Engineering measures:** Use with local exhaust ventilation
- c. **Personal protection** : Wear rubber gloves and protective clothing

**SECTION 10: STABILITY AND REACTIVITY**  
=====

**Conditions to avoid** : Avoid high heat or flame  
**Incompatibles** : Avoid contact with combustible material and strong alkali, may cause fire.  
**Decomposition Products** : oxygen  
**Hazardous polymerization** : Will not occur  
The product is considered a stable material under normal and anticipated storage and handling conditions

**SECTION 11: TOXICOLOGICAL INFORMATION**  
=====

**Toxicity Data** : High toxicity after inhalation. Inhalation causes irritation to mucous membranes and can result in ulceration or perforation of the nasal septum. Can be absorbed into the skin and cause systemic poisoning and subsequently kidney failure.

**Animals**      **Rats** : LD<sub>50</sub> oral, 52 mg / kg  
                 **Rabbit 24hr** : LD<sub>50</sub> thermal, 57 mg / kg  
                 **Rat, inhalation:** LD<sub>50</sub> (4hr) I, 217 mg / kg

**Carcinogenicity** : NTP: No IARC: NA OSHA: NA  
**Reproductive Effect** : NA  
**Effects of overexposure** : Serious local itching effect on skin, eyes and mucous membranes. Vapour irritates the respiratory organs.

**Chronic effects** : NA  
**Target organs** : Respiratory systems, nasal, septum, skin, eyes and teeth

## Tri-Mate 8370

### SECTION 12: ECOLOGICAL INFORMATION

=====

The chemicals have highly toxic effect on fish and plankton. The toxicity limit depends on species and size of organism, and on water quality (hardness, purity, oxygen content etc.)

### SECTION 13: DISPOSAL INFORMATION

=====

Disposal method in accordance with all applicable national environment laws and regulations.

Destroy chromic acids solution with sodium metabisulfite and neutralize pH to neutral and dispose material in accordance with federal regulations.

### SECTION 14: TRANSPORT INFORMATION

=====

Transport : IMDG code : 5.1                      UN No : 1463                      ICAO/IATA-DGR : 5.1 / 1463  
GGVE/ GGVS / RID / ADR    5.1  
Other information : MFAG table No : 215    EMS table No : 6.1 - 04

### SECTION 15: REGULATORY INFORMATION

=====

This product has to be marked as a preparation according to the order of dangerous goods as provided in appendix:

Contains	: Chromium nitrate	CAS No: 7789-02-8	Danger : Oxidising and Corrosive
	: Cobalt nitrate	CAS No: 10141-05-6	

Risk phrases :	8	Contact with combustible material may cause fire
	35	Causes severe burns
Safety phrases:	43	May cause sensitization by skin contact
	29	Do not empty into drains
	26/28	In case of contact with eyes/skin, rinse immediately with plenty of water and seek medical advice
	36/37/39	Wear suitable protective clothing, gloves and eyes/face protection

Shelf Life : 24 months from date of manufacture for unopened containers.

### SECTION 16: OTHER INFORMATION

=====

This product is intended for use as chemical surface treatment and Rica undertakes no liability for other applications. The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.