

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name ZINC CHROMATE
Synonym(s) BASIC ZINC CHROMATE • C.I. PIGMENT YELLOW 36 • CHROMIUM ZINC OXIDE • CITRON YELLOW • PRIMROSE YELLOW • ZINC CHROMATE (VI) HYDROXIDE • ZINC CHROME YELLOW • ZINC YELLOW

1.2 Uses and uses advised against

Use(s) INDUSTRIAL APPLICATIONS

1.3 Details of the supplier of the safety data sheet

Supplier name GENERIC REPORT - FOR REFERENCE PURPOSES ONLY
Address PO Box 21, West Perth, WA, Australia, 6872
Telephone (08) 9322 1711
Fax (08) 9322 1794
Email Not supplied
Website Not supplied

1.4 Emergency telephone number(s)

Emergency (08) 9322 1711

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

GHS Classification(s) Acute Toxicity: Oral: Category 4
Skin Sensitization: Category 1
Carcinogenicity: Category 1A
Aquatic Toxicity (Chronic): Category 1

2.2 Label elements

Signal word

DANGER

Pictograms



Hazard statement(s)

H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H350 May cause cancer.
H410 Very toxic to aquatic life with long lasting effects.

Prevention statement(s)

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment. This statement does not apply where this is the intended use.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response statement(s)

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P321 Specific treatment is advised - see first aid instructions.

Product name ZINC CHROMATE

P330 Rinse mouth.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.
Storage statement(s)
P405 Store locked up.
Disposal statement(s)
P501 Dispose of contents/container in accordance with relevant regulations.

2.3 Other Hazards

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS number	EC number	Content
ZINC CHROMATE	13530-65-9	236-878-9	100%

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

Inhalation If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

Ingestion For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, induce vomiting, followed by prompt and complete gastric lavage, catharsis, and demulcents.

First aid facilities No information provided.

4.2 Most important symptoms and effects, both acute and delayed

No information provided.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Non flammable. May evolve toxic gases if strongly heated.

5.3 Advice for firefighters

No fire or explosion hazard exists.

5.4 Hazchem code

2X
2 Water Fog (or fine water spray if fog unavailable)
X Full protective clothing including Self Contained Breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Product name ZINC CHROMATE

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Contact emergency services where appropriate.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then collect and place in suitable containers for reuse or disposal. Avoid generating dust.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from incompatible substances and foodstuffs. Ensure containers are adequately labelled and tightly closed when not in use.

7.3 Specific end use(s)

No information provided.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

Substance	Reference	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Zinc chromate (as Cr)	SWA (AUS)	--	0.01	--	--

Biological limits

No biological limit values have been entered for this product.

8.2 Exposure controls

Engineering Controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

PPE

Eye/Face Wear dust-proof goggles.
Hand Wear rubber or PVA gloves.
Body Wear impervious coveralls.
Respiratory Wear a Class P1 (Particulate) respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance YELLOW COLOURED POWDER
Odour ODOURLESS
Odour Threshold NOT AVAILABLE
pH NOT AVAILABLE
Melting Point 316°C
Boiling Point NOT AVAILABLE

Product name	ZINC CHROMATE
Flash Point	NOT RELEVANT
Evaporation Rate	NOT AVAILABLE
Flammability	NON FLAMMABLE
Upper Explosion Limit	NOT RELEVANT
Lower Explosion Limit	NOT RELEVANT
Vapour Pressure	NOT AVAILABLE
Vapour Density	NOT AVAILABLE
Solubility (water)	SLIGHTLY SOLUBLE
Partition Coefficient	NOT AVAILABLE
Autoignition Temperature	NOT AVAILABLE
Decomposition Temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive Properties	NOT AVAILABLE
Oxidising Properties	NOT AVAILABLE
Specific Gravity	3.43
9.2 Other information	
% Volatiles	NOT AVAILABLE

10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information in sections 10.2 to 10.6.

10.2 Chemical stability

No information provided.

10.3 Possibility of hazardous reactions

No information provided.

10.4 Conditions to avoid

No information provided.

10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), heat and ignition sources.

10.6 Hazardous decomposition products

May evolve toxic gases if heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Health hazard summary	Carcinogenic. This product has the potential to cause adverse health effects. Use safe work practices to avoid eye or skin contact and inhalation. Chronic exposure to zinc chromate may result in lesions of the eyes, skin, and mucous membranes, nasal septal perforations, olfactory sense impairment, and yellowing of the teeth and tongue. Chronic exposure may also result in chronic bronchitis, rhinitis, and nasal mucosal polyps, and also lead to chemical pneumonitis. Symptoms include wheezing, pain during inspiration, and coughing. May cause sensitisation by skin contact. Zinc chromate is classified as carcinogenic to humans (IARC Group 1).
Eye	Irritant. Contact may result in irritation, lacrimation, pain and redness.
Inhalation	Irritant - toxic. Over exposure may result in respiratory irritation, coughing and nausea. Zinc chromate (Chromium (VI) compounds) is classified as carcinogenic to humans (IARC Group 1).
Skin	Irritant. Contact may result in irritation, redness, rash and dermatitis. May be absorbed through skin with harmful effects. May cause sensitisation by skin contact.
Ingestion	Toxic. Ingestion may result in nausea, vomiting, abdominal pain and diarrhoea. Ingestion can cause irritation or corrosion of the alimentary tract, circulatory collapse, and toxic nephritis.
Toxicity data	ZINC CHROMATE (13530-65-9) LDLo (Intravenous): 30 mg/kg (mouse) TCLo (Inhalation): 5 mg/m ³ /8 hours/7 years/intermittent (human - cancer)

Product name ZINC CHROMATE

12. ECOLOGICAL INFORMATION**12.1 Toxicity**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2 Persistence and degradability

No information provided.

12.3 Bioaccumulative potential

No information provided.

12.4 Mobility in soil

No information provided.

12.5 Results of PBT and vPvB assessment

No information provided.

12.6 Other adverse effects

No information provided.

13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Waste disposal Ensure product is covered with moist soil to prevent dust generation and dispose of to approved Council landfill. Contact the manufacturer/supplier for additional information (if required). At the time of review, criteria for land treatment or burial (sanitary landfill) disposal practices are subject to significant revision. Prior to implementing land disposal of waste residue (including waste sludge), consult with environmental regulatory agencies for guidance on acceptable disposal practices. Please contact your local Environmental Protection Agency for further advice.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE



	Land Transport (ADG)	Sea Transport (IMDG/IMO)	Air Transport (IATA/ICAO)
14.1 UN number	3288	-	-
14.2 UN proper shipping name	TOXIC SOLID, INORGANIC, N.O.S.	-	-
14.3 Transport hazard classes			
DG division	6.1	-	-
Subsidiary risk(s)	None Allocated	-	-
14.4 Packing group	III	-	-
14.5 Environmental hazards		None Allocated	
14.6 Special precautions for user			
Hazchem Code	2X		

15. REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Poison schedule Classified as a Schedule 6 Poison using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications Carc. - Carcinogen

Product name	ZINC CHROMATE	
	N - Dangerous for the environment Xi - Irritant Xn - Harmful	
Risk phrases	R22:	Harmful if swallowed.
	R43:	May cause sensitisation by skin contact.
	R45:	May cause cancer.
	R50/53:	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases	S45:	In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).
	S53:	Avoid exposure - obtain special instructions before use.
	S60:	This material and its container must be disposed of as hazardous waste.
	S61:	Avoid release to the environment. Refer to special instructions/safety data sheets.
Inventory listing(s)	AUSTRALIA: AICS (Australian Inventory of Chemical Substances) All components are listed on AICS, or are exempt.	

15.2 Chemical safety assessment

No information provided.

16. OTHER INFORMATION

Additional information	HEALTH EFFECTS FROM EXPOSURE: It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.	
	PERSONAL PROTECTIVE EQUIPMENT GUIDELINES: The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.	
	COLOUR RATING SYSTEM: RMT has assigned all ChemAlert reports a colour rating of Green, Amber or Red for the sole purpose of providing users with a quick and easy means of determining the hazardous nature of a product. Safe handling recommendations are provided in all ChemAlert reports so as to clearly identify how users can control the hazards and thereby reduce the risk (or likelihood) of adverse effects. As a general guideline, a Green colour rating indicates a low hazard, an Amber colour rating indicates a moderate hazard and a Red colour rating indicates a high hazard.	
	While all due care has been taken by RMT in the preparation of the Colour Rating System, it is intended as a guide only and RMT does not provide any warranty in relation to the accuracy of the Colour Rating System. As far as is lawfully possible, RMT accepts no liability or responsibility whatsoever for the actions or omissions of any person in reliance on the Colour Rating System.	
Abbreviations	ACGIH	American Conference of Governmental Industrial Hygienists
	CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
	CNS	Central Nervous System
	EC No.	EC No - European Community Number
	EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
	GHS	Globally Harmonized System
	GTEPG	Group Text Emergency Procedure Guide
	IARC	International Agency for Research on Cancer
	LC50	Lethal Concentration, 50% / Median Lethal Concentration
	LD50	Lethal Dose, 50% / Median Lethal Dose
	mg/m ³	Milligrams per Cubic Metre
	OEL	Occupational Exposure Limit

Product name**ZINC CHROMATE**

PEL	Permissible Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
REACH	Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

Report Status

This ChemAlert report has been independently compiled by RMT's scientific department utilising the original Safety Data Sheet ('SDS') for the product provided to RMT by the manufacturer. The information is based on the latest chemical and toxicological research and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. It is an independent collation by RMT of information obtained from the original SDS for this product. Its content has not been authorised or verified by the manufacturer / distributor of the chemical to which it relates.

This ChemAlert report does not constitute the manufacturer's original SDS and is not intended to be a replacement for same. It is provided to subscribers of ChemAlert as a reference tool only, is not all-inclusive and does not represent any guarantee as to the properties of the product. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this ChemAlert report, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this ChemAlert report.

Prepared By

Risk Management Technologies
5 Ventnor Ave, West Perth
Western Australia 6005
Phone: +61 8 9322 1711
Fax: +61 8 9322 1794
Email: info@rmt.com.au
Web: www.rmt.com.au

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End of Report