

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### 1.1 Product identifier

**Product name** BONDERITE M-CR 600RTU AERO  
**Synonym(s)** BONDERITE M-CR 600RTU AERO • NSN: 8030-01-643-2980 • PART NO: 1939170  
1939170 - PRODUCT CODE • BONDERITE M-CR 600 RTU AERO • BONDERITE MCR 600RTU AERO

### 1.2 Uses and uses advised against

**Use(s)** PRETREATMENT

### 1.3 Details of the supplier of the safety data sheet

**Supplier name** HENKEL AUSTRALIA PTY LTD  
**Address** 135 - 141 Canterbury Rd, Kilsyth, VIC, Australia, 3137  
**Telephone** (03) 9724 6444  
**Fax** (03) 9728 5877  
**Email** msds@au.henkel.com  
**Website** <http://www.loctite.com.au>

### 1.4 Emergency telephone number(s)

**Emergency** 1800 032 379; (03) 9724 6556

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

**GHS Classification(s)** Skin Sensitisation: Category 1  
Acute Toxicity: Inhalation: Category 4  
Respiratory Sensitisation: Category 1  
Germ Cell Mutagenicity: Category 1B  
Carcinogenicity: Category 1A  
Toxic to Reproduction: Category 1B  
Aquatic Toxicity (Chronic): Category 3

### 2.2 Label elements

**Signal word**

**DANGER**

**Pictograms**



**Hazard statement(s)**

H317 May cause an allergic skin reaction.  
H332 Harmful if inhaled.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H340 May cause genetic defects.  
H350 May cause cancer.  
H360 May damage fertility or the unborn child.  
H412 Harmful to aquatic life with long lasting effects.

**Prevention statement(s)**

P202 Do not handle until all safety precautions have been read and understood.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P271 Use only outdoors or in a well-ventilated area.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.

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P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P285 In case of inadequate ventilation wear respiratory protection.

**Response statement(s)**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
 P321 Specific treatment is advised - see first aid instructions.  
 P363 Wash contaminated clothing before reuse.

**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
CHROMIC (VI) ACID	7738-94-5	231-801-5	0.1 - <1%
POTASSIUM FLUOROZIRCONATE	16923-95-8	240-985-6	0.1 - 1%
SODIUM CHROMATE	7775-11-3	231-889-5	0.1 - <1%
SODIUM FLUOROBORATE	13755-29-8	237-340-6	0.1 - 1%
NON HAZARDOUS INGREDIENTS	Not Available	Not Available	remainder

**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).  
**First aid facilities** Eye wash facilities and safety shower should be available.

**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 hexavalent chromium oxides when heated to decomposition.

**5.3 Advice for firefighters**

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

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**5.4 Hazchem code**

None allocated

**6. ACCIDENTAL RELEASE MEASURES**

**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. Ventilate area where possible. 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 cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

**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. Contamination with incompatibles may cause fire or explosion. Ensure packages are adequately labelled, protected from physical damage and sealed 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 <sup>3</sup>	ppm	mg/m <sup>3</sup>
Chromium (VI) compounds (as Cr)	SWA (AUS)	--	0.05	--	--
Chromium (VI) compounds (as Cr), water soluble	SWA (AUS)	--	0.05	--	--
Fluorides (as F)	SWA (AUS)	--	2.5	--	--

**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. Maintain vapour levels below the recommended exposure standard.

**PPE**

- Eye/Face**                    Wear splash-proof goggles.
- Hand**                        Wear PVC or rubber gloves.
- Body**                        Wear coveralls.
- Respiratory**                No PPE specified.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	ORANGE LIQUID
Odour	BLAND ODOUR
Odour Threshold	NOT AVAILABLE
pH	< 2
Melting Point	NOT AVAILABLE
Boiling Point	NOT AVAILABLE
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)	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	1.01 to 1.03

### 9.2 Other information

No information provided.

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Carefully review all information in sections 10.2 to 10.6.

### 10.2 Chemical stability

Stable under recommended conditions of storage.

### 10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

### 10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

### 10.5 Incompatible materials

Incompatible with combustible materials, reducing agents (e.g. sulphites), metals and some plastics and resins.

### 10.6 Hazardous decomposition products

May evolve toxic hexavalent chromium oxides when heated to decomposition.

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**11. TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

<b>Health hazard summary</b>	Harmful - irritant. This product has the potential to cause adverse health effects with over exposure. Use safe work practices to avoid eye or skin contact and inhalation. May cause sensitisation by skin contact. Hexavalent chromium compounds are classified as carcinogenic to humans (IARC Group 1). May cause heritable genetic damage. May impair fertility. May cause harm to the unborn child.
<b>Eye</b>	Irritant. Contact may result in irritation, lacrimation, pain and redness. May result in burns with prolonged contact.
<b>Inhalation</b>	Irritant. Over exposure may result in irritation of the nose and throat, with coughing. Hexavalent chromium compounds are classified as carcinogenic to humans (IARC Group 1).
<b>Skin</b>	Irritant. Contact may result in irritation, redness, rash and dermatitis. May be absorbed through skin with harmful effects. May cause sensitisation by skin contact.
<b>Ingestion</b>	Harmful. Ingestion may result in gastrointestinal irritation, nausea, vomiting, abdominal pain and diarrhoea. Ingestion of large quantities may result in dizziness, drowsiness and unconsciousness. Chronic exposure may result in liver and kidney damage.
<b>Toxicity data</b>	<p>CHROMIC (VI) ACID (7738-94-5)</p> <p>LC50 (Inhalation): 0.21 mg/L/4 hours (rat)</p> <p>LD50 (Ingestion): 330 mg/kg (dog)</p> <p>LD50 (Intraperitoneal): 14 mg/kg (mouse)</p> <p>LD50 (Intravenous): 9260 ug/kg (rat)</p> <p>LD50 (Skin): 57 mg/kg</p> <p>TCLo (Inhalation): 110 ug/m<sup>3</sup> (human)</p> <p>TDLo (Ingestion): 100 mg/kg (woman)</p> <p>POTASSIUM FLUOROZIRCONATE (16923-95-8)</p> <p>LD50 (Ingestion): 98 mg/kg (mouse)</p> <p>SODIUM CHROMATE (7775-11-3)</p> <p>LD50 (Intraperitoneal): 32 mg/kg (mouse)</p> <p>LD50 (Intravenous): 164 mg/kg (cat)</p> <p>LDLo (Intraperitoneal): 206 mg/kg (guinea pig)</p> <p>LDLo (Intravenous): 32 mg/kg (rabbit)</p> <p>LDLo (Skin): 206 mg/kg (guinea pig)</p> <p>LDLo (Subcutaneous): 30 mg/kg (guinea pig)</p> <p>SODIUM FLUOROBORATE (13755-29-8)</p> <p>LD50 (Subcutaneous): 550 mg/kg (rat)</p>

**12. ECOLOGICAL INFORMATION**

**12.1 Toxicity**

Harmful 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**

WATER: Chromium (VI) may be reduced to Chromium (III) by organic matter present in water, and may eventually deposit in

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sediments. Toxic to microorganisms. May bioaccumulate. SOIL: Chromium in the soil may be transported from soil through runoff and leaching of water. ATMOSPHERE: Chromium is primarily removed from the atmosphere by fallout and precipitation and may enter surface water or soil.

**13. DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

**Waste disposal** Add a solution of a mild reducing agent (thiosulphate, bisulphate or ferrous salt, but not carbon or sulphur) to the product. A sulphite or ferrous salt will require addition of 3 M sulphuric acid to promote reduction. Neutralise the solution with soda ash. Absorb with sand or similar and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information (if required).

**Legislation** Dispose of in accordance with relevant local legislation.

**14. TRANSPORT INFORMATION**

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

	Land Transport (ADG)	Sea Transport (IMDG/IMO)	Air Transport (IATA/ICAO)
<b>14.1 UN number</b>	None Allocated	None Allocated	None Allocated
<b>14.2 UN proper shipping name</b>	None Allocated	None Allocated	None Allocated
<b>14.3 Transport hazard classes</b>			
<b>DG Class</b>	None Allocated	None Allocated	None Allocated
<b>Subsidiary risk(s)</b>	None Allocated	None Allocated	None Allocated
<b>14.4 Packing group</b>	None Allocated	None Allocated	None Allocated
<b>14.5 Environmental hazards</b>		None Allocated	
<b>14.6 Special precautions for user</b>			
<b>Hazchem Code</b>	None Allocated		

**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  
Muta. - Mutagen  
N - Dangerous for the environment  
Repr. - Reproductive toxin  
Xi - Irritant  
Xn - Harmful

**Risk phrases** R20: Harmful by inhalation.  
R42/43: May cause sensitisation by inhalation and skin contact.  
R45: May cause cancer.  
R46: May cause heritable genetic damage.  
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R60: May impair fertility.  
R61: May cause harm to the unborn child.

**Safety phrases** S23: Do not breathe gas/fumes/vapour/spray (where applicable).  
S35: This material and its container must be disposed of in a safe way.  
S36/37: Wear suitable protective clothing and gloves.

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- 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.
- S61: Avoid release to the environment. Refer to special instructions/safety data sheets.

**WHS regulatory information**

Ingredient name	CAS number	Regulation	Details
SODIUM CHROMATE	7775-11-3	Restricted Hazardous Chemicals	Chromate. For wet abrasive blasting.

**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** IARC GROUP 1 - CONFIRMED HUMAN CARCINOGEN. This product contains an ingredient for which there is sufficient evidence to have been classified by the International Agency for Research into Cancer as a human carcinogen. The use of products known to be human carcinogens should be strictly monitored and controlled.

CHROMATES - CHROMIUM PRODUCTS: Asthma sufferers, respiratory impaired or previously sensitised (respiratory or skin) individuals are advised to avoid all exposure to chromium or chromate based products.

CHROMIUM: The most common form of chromium found in nature and in biological materials is trivalent (III) chromium which is poorly absorbed into the body. Chromium (VI) is readily absorbed where it is converted intracellularly to the carcinogenic chromium (III) form. Chromium (VI) compounds are classified as carcinogenic to humans (IARC Group 1). Chromium (III) is not classifiable as to its carcinogenicity in humans (IARC Group 3).

**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.

**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<sup>3</sup> Milligrams per Cubic Metre
- OEL Occupational Exposure Limit

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pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
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.

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**End of Report**