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
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.
CHEMALERT REPORT

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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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS number</th>
<th>EC number</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHROMIC (VI) ACID</td>
<td>7738-94-5</td>
<td>231-801-5</td>
<td>0.1 - &lt;1%</td>
</tr>
<tr>
<td>POTASSIUM FLUOROZIRCONATE</td>
<td>16923-95-8</td>
<td>240-985-6</td>
<td>0.1 - 1%</td>
</tr>
<tr>
<td>SODIUM CHROMATE</td>
<td>7775-11-3</td>
<td>231-889-5</td>
<td>0.1 - &lt;1%</td>
</tr>
<tr>
<td>SODIUM FLUOROBORATE</td>
<td>13755-29-8</td>
<td>237-340-6</td>
<td>0.1 - 1%</td>
</tr>
<tr>
<td>NON HAZARDOUS INGREDIENTS</td>
<td>Not Available</td>
<td>Not Available</td>
<td>remainder</td>
</tr>
</tbody>
</table>

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.
Product name  BONDERITE M-CR 600RTU AERO

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Reference</th>
<th>TWA ppm</th>
<th>TWA mg/m³</th>
<th>STEL ppm</th>
<th>STEL mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromium (VI) compounds (as Cr)</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>0.05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Chromium (VI) compounds (as Cr), water soluble</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>0.05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Fluorides (as F)</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>2.5</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

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.
9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>ORANGE LIQUID</td>
</tr>
<tr>
<td>Odour</td>
<td>BLAND ODOUR</td>
</tr>
<tr>
<td>Odour Threshold</td>
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</tr>
<tr>
<td>pH</td>
<td>&lt; 2</td>
</tr>
<tr>
<td>Melting Point</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Flash Point</td>
<td>NOT RELEVANT</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Flammability</td>
<td>NON FLAMMABLE</td>
</tr>
<tr>
<td>Upper Explosion Limit</td>
<td>NOT RELEVANT</td>
</tr>
<tr>
<td>Lower Explosion Limit</td>
<td>NOT RELEVANT</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Vapour Density</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>SOLUBLE</td>
</tr>
<tr>
<td>Partition Coefficient</td>
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</tr>
<tr>
<td>Autoignition Temperature</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Viscosity</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Oxidising Properties</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.01 to 1.03</td>
</tr>
</tbody>
</table>

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.
11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Health hazard summary

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.

Eye

Irritant. Contact may result in irritation, lacrimation, pain and redness. May result in burns with prolonged contact.

Inhalation

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).

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

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.

Toxicity data

CHROMIC (VI) ACID (7738-94-5)
  LC50 (Inhalation): 0.21 mg/L/4 hours (rat)
  LD50 (Ingestion): 330 mg/kg (dog)
  LD50 (Intraperitoneal): 14 mg/kg (mouse)
  LD50 (Intravenous): 9260 ug/kg (rat)
  LD50 (Skin): 57 mg/kg
  TCLo (Inhalation): 110 ug/m³ (human)
  TDLo (Ingestion): 100 mg/kg (woman)

POTASSIUM FLUOROZIRCONATE (16923-95-8)
  LD50 (Ingestion): 98 mg/kg (mouse)

SODIUM CHROMATE (7775-11-3)
  LD50 (Intraperitoneal): 32 mg/kg (mouse)
  LD50 (Intravenous): 164 mg/kg (cat)
  LDLo (Intraperitoneal): 206 mg/kg (guinea pig)
  LDLo (Intravenous): 32 mg/kg (rabbit)
  LDLo (Skin): 206 mg/kg (guinea pig)
  LDLo (Subcutaneous): 30 mg/kg (guinea pig)

SODIUM FLUOROBORATE (13755-29-8)
  LD50 (Subcutaneous): 550 mg/kg (rat)

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
Product name: BONDERITE M-CR 600RTU AERO

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

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

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.
Product name: BONDERITE M-CR 600RTU AERO

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

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>CAS number</th>
<th>Regulation</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM CHROMATE</td>
<td>7775-11-3</td>
<td>Restricted Hazardous Chemicals</td>
<td>Chromate. For wet abrasive blasting.</td>
</tr>
</tbody>
</table>

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/m³ 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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Based on SDS dated: 22 Jul 2014

End of Report