



MATERIAL SAFETY DATA SHEET

Product Name CRC 2087 BRIGHT ZINC AEROSOL

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name CRC INDUSTRIES (AUST) PTY LIMITED
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Synonym(s) 2087 - PRODUCT CODE
Use(s) CORROSION PREVENTION
SDS Date 01 Apr 2010

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO ASCC CRITERIA

RISK PHRASES

R11 Highly flammable.
R20 Harmful by inhalation.
R20/21 Harmful by inhalation and in contact with skin.
R38 Irritating to skin.

SAFETY PHRASES

S16 Keep away from sources of ignition - No smoking.
S2 Keep out of reach of children.
S25 Avoid contact with eyes.
S29 Do not empty into drains.
S33 Take precautionary measures against static discharges.

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

| | | | | | |
|----------------------|----------------|---------------------|-----|---------------------------|----------------|
| UN No. | 1950 | DG Class | 2.1 | Subsidiary Risk(s) | None Allocated |
| Packing Group | None Allocated | Hazchem Code | 2Y | EPG | 2D1 |

3. COMPOSITION/ INFORMATION ON INGREDIENTS

| Ingredient | Formula | CAS No. | Content |
|-------------------------------|-----------------|------------|---------|
| LIQUEFIED PETROLEUM GAS (LPG) | C3H8/C3H6/C4H10 | 68476-85-7 | 25-35% |
| TOLUENE | C7-H8 | 108-88-3 | 10-30% |
| ZINC | Zn | 7440-66-6 | 10-30% |
| XYLENE | C8-H10 | 1330-20-7 | 1-9% |
| ALUMINIUM | Al | 7429-90-5 | 1-3% |

4. FIRST AID MEASURES

| | |
|-----------------------------|---|
| Eye | If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor, or for at least 15 minutes. |
| Inhalation | If inhaled, remove from contaminated area. To protect rescuer, use a Type A (Organic vapour) respirator or an Air-line respirator (in poorly ventilated areas). 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 on 13 11 26 (Australia Wide) or a doctor. |
| Ingestion | For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting. |
| Advice to Doctor | Treat symptomatically |
| First Aid Facilities | Eye wash facilities and safety shower are recommended. |

5. FIRE FIGHTING MEASURES

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|---------------------------|--|
| Flammability | Highly flammable. May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition. Vapour may form explosive mixtures with air. Eliminate all ignition sources including cigarettes, open flames, spark producing switches/tools, heaters, naked lights, pilot lights etc. when handling. Aerosol cans may explode when heated above 50°C. |
| Fire and Explosion | 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. |
| Extinguishing | Dry agent, carbon dioxide or foam. Prevent contamination of drains or waterways. |
| Hazchem Code | 2Y |

6. ACCIDENTAL RELEASE MEASURES

| | |
|-----------------|--|
| Spillage | If cans/containers are punctured (bulk), use personal protective equipment. Clear area of all unprotected personnel. Ventilate area where possible. Collect and allow to discharge outdoors. Contain spillage, then cover / absorb spill with non-combustible absorbant material (vermiculite, sand, or similar), collect and place in suitable containers for disposal. |
|-----------------|--|

7. STORAGE AND HANDLING

| | |
|-----------------|---|
| Storage | Store in a cool, dry, well ventilated area, removed from oxidising agents, acids, alkalis, heat or ignition sources and foodstuffs. Ensure aerosol containers/ cans are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for damaged/ leaking containers. Large storage areas should have appropriate fire protection and ventilation systems. |
| 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. |

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

| Exposure Stds | Ingredient | Reference | TWA | | STEL | |
|---------------|-------------------------------|------------|------|-------|------|-------|
| | | | ppm | mg/m3 | ppm | mg/m3 |
| | Aluminium (metal dust) | ASCC (AUS) | -- | 10 | -- | -- |
| | LIQUEFIED PETROLEUM GAS (LPG) | ASCC (AUS) | 1000 | 1800 | 1000 | 1800 |
| | Toluene | ASCC (AUS) | 50 | 191 | 150 | 574 |
| | Xylene | ASCC (AUS) | 80 | -- | 150 | -- |
| | Zinc oxide (dust) | ASCC (AUS) | -- | 10 | -- | -- |

| Biological Limits | Ingredient | Reference | Determinant | Sampling Time | BEI |
|-------------------|------------|-----------|------------------------|---------------|--------------------|
| | TOLUENE | ACGIH BEI | o-Cresol in urine | End of shift | 0.5 mg/L |
| | | ACGIH BEI | Hippuric acid in urine | End of shift | 1.6 g/g creatinine |

| Ingredient | Reference | Determinant | Sampling Time | BEI |
|------------|-----------|-------------------------------|---------------------------------|--------------------|
| | ACGIH BEI | Toluene in blood | Prior to last shift of workweek | 0.05 mg/L |
| XYLENE | ACGIH BEI | Methylhippuric acids in urine | End of shift | 1.5 g/g creatinine |

Engineering Controls

Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical explosion proof extraction ventilation is recommended. Flammable/explosive vapours may accumulate in poorly ventilated areas. Vapours are heavier than air and may travel some distance to an ignition source and flash back. Maintain vapour levels below the recommended exposure standard.

PPE

Wear splash-proof goggles and viton (R) or PVA gloves. When using large quantities or where heavy contamination is likely, wear: coveralls. Where an inhalation risk exists, wear: a Type A-Class P1 (Organic gases/vapours and Particulate) respirator.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

| | | | |
|------------------|------------------------------|-----------------------|------------------|
| Appearance | VISCOUS BRIGHT SILVER LIQUID | Solubility (Water) | INSOLUBLE |
| Odour | SLIGHT ODOUR | Specific Gravity | NOT AVAILABLE |
| pH | NOT AVAILABLE | % Volatiles | NOT AVAILABLE |
| Vapour Pressure | NOT AVAILABLE | Flammability | HIGHLY FLAMMABLE |
| Vapour Density | NOT AVAILABLE | Flash Point | -81°C |
| Boiling Point | NOT AVAILABLE | Upper Explosion Limit | NOT AVAILABLE |
| Melting Point | NOT AVAILABLE | Lower Explosion Limit | NOT AVAILABLE |
| Evaporation Rate | NOT AVAILABLE | | |

10. STABILITY AND REACTIVITY

| | |
|---------------------|---|
| Chemical Stability | Stable under recommended conditions of storage. |
| Conditions to Avoid | Avoid shock, friction, heavy impact, heat, sparks, open flames and other ignition sources. |
| Material to Avoid | Incompatible with oxidising agents (eg. hypochlorites), acids (eg. nitric acid), alkalis (eg. hydroxides), heat and ignition sources. |
| Decomposition | May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition. |
| Hazardous Reactions | Polymerization will not occur. |

11. TOXICOLOGICAL INFORMATION

| | |
|-----------------------|--|
| Health Hazard Summary | Moderate toxicity - 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. Over exposure may result in anaemia and liver/kidney/ CNS damage. Deliberate misuse by inhaling contents of this aerosol may be fatal. When used in small aerosol containers, the potential for an inhalation hazard is reduced. |
| Eye | Irritant. Contact may result in irritation, lacrimation, pain, redness and conjunctivitis. May result in burns with prolonged contact. |
| Inhalation | Irritant - toxic. Over exposure may result in irritation of the nose and throat, coughing, nausea, headache, fatigue, loss of appetite and vomiting. High level exposure may result in dizziness, breathing difficulties, pulmonary oedema and unconsciousness. Chronic exposure may result in kidney, liver and CNS damage. |
| Skin | Irritant. Contact may result in drying and defatting of the skin, rash and dermatitis. May be absorbed through skin with harmful effects. |
| Ingestion | Ingestion is considered unlikely due to product form. |
| Toxicity Data | TOLUENE (108-88-3) LC50 (Inhalation): 400 ppm/24 hours (mouse) LCLo (Inhalation): 1600 ppm (guinea pig) |

LD50 (Ingestion): 636 mg/kg (rat)
LD50 (Skin): 14100 uL/kg (rabbit)
LDLo (Ingestion): 50 mg/kg (human)
TCLo (Inhalation): 50 ppm (man)
TDLo (Ingestion): 400 mg/kg (rat)

XYLENE (1330-20-7)

Carcinogenicity: Not classifiable as to its carcinogenicity (IARC Group 3)
LC50 (Inhalation): 5000 ppm/4 hours (rat)
LCLo (Inhalation): 10000 ppm/6 hours (man)
LD50 (Ingestion): 4300 mg/kg (rat)
LD50 (Intraperitoneal): 1548 mg/kg (mouse)
LD50 (Skin): > 1700 mg/kg (rabbit)
LD50 (Subcutaneous): 1700 mg/kg (rat)
LDLo (Ingestion): 50 mg/kg (human)
LDLo (Intravenous): 129 mg/kg (rabbit)
TCLo (Inhalation): 200 ppm (human - eye, respiratory)
TDLo (Ingestion): 20600 ug/kg (6-15 days pregnant mouse - teratogenic)

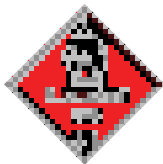
12. ECOLOGICAL INFORMATION

Environment If aromatic hydrocarbons are released to soil, they will evaporate from near-surface soil & leach to groundwater. Biodegradation occurs in soil & groundwater but may be slow, especially at high concentrations, which can be toxic to microorganisms. Will exist largely as vapour in air. Half life in atmosphere depends on particular hydrocarbon (eg 1-2 days (xylene); 3 hrs-1 day (toluene)).

13. DISPOSAL CONSIDERATIONS

Waste Disposal For small amounts absorb contents with sand or similar and dispose of to an approved landfill site. Do not puncture or incinerate aerosol cans. Contact the manufacturer for additional information.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION**CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE**

| | | | | | |
|----------------------|----------------|---------------------|-----|---------------------------|----------------|
| Shipping Name | AEROSOLS | | | | |
| UN No. | 1950 | DG Class | 2.1 | Subsidiary Risk(s) | None Allocated |
| Packing Group | None Allocated | Hazchem Code | 2Y | EPG | 2D1 |

15. REGULATORY INFORMATION

Poison Schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

AICS All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Additional Information SYNERGISM - ANTAGONISM: Ingredients in this product may act together to aggravate or reduce adverse effects. Accordingly the time weighted average concentration (TWA) provided for single ingredients should be considered as a guide only and all due care exercised when handling.

WORK PRACTICES - SOLVENTS: Organic solvents may present both a health and flammability hazard. It is recommended that engineering controls should be adopted to reduce exposure where practicable (for example, if using indoors, ensure explosion proof extraction ventilation is available). Flammable or combustible liquids with explosive limits have the potential for ignition from static discharge. Refer to AS 1020 (The control of undesirable static electricity) and AS 1940 (The storage and handling of flammable and combustible liquids) for control procedures.

EXPOSURE STANDARDS - TIME WEIGHTED AVERAGE (TWA) or WES (WORKPLACE EXPOSURE STANDARD) (NZ): Exposure standards are established on the premise of an 8 hour work period of normal

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intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

ABBREVIATIONS:

ADB - Air-Dry Basis.

BEI - Biological Exposure Indice(s)

CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.

CNS - Central Nervous System.

EINECS - European INventory of Existing Commercial chemical Substances.

IARC - International Agency for Research on Cancer.

M - moles per litre, a unit of concentration.

mg/m³ - Milligrams per cubic metre.

NOS - Not Otherwise Specified.

NTP - National Toxicology Program.

OSHA - Occupational Safety and Health Administration.

pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).

ppm - Parts Per Million.

RTECS - Registry of Toxic Effects of Chemical Substances.

TWA/ES - Time Weighted Average or Exposure Standard.

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 Chem Alert 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 Chem Alert 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.

Report Status

This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer or obtained from third party sources 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. 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 SDS, 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 SDS.

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End of Report