AMBER

# Material Safety Data Sheet

**Product Name** **CHEMSPOTMARKER SC-OM350**

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

| | |
|---|---|
| **Supplier Name** | **HEINEMANN ELECTRIC PTY LTD** |
| **Address** | 821 Springvale Road, Mulgrave, Victoria, AUSTRALIA, 3170 |
| **Telephone** | (03) 9590 3500 |
| **Fax** | (03) 9562 0420 |
| **Emergency** | (03) 9590 3500 |
| **Email** | sales@heinelec.com.au |
| **Web Site** | http://www.heinemannelectric.com.au |
| **Synonym(s)** | SC-OM350 - PRODUCT CODE |
| **Use(s)** | MARKING PAINT • PAINT • PAINT - AEROSOL DISPENSED |
| **MSDS Date** | 08 Dec 2006 |

## 2. HAZARDS IDENTIFICATION

**CLASSIFIED AS HAZARDOUS ACCORDING TO ASCC CRITERIA**

**RISK PHRASES**

| | |
|---|---|
| R11 | Highly flammable. |
| R20 | Harmful by inhalation. |
| R40 | Limited evidence of a carcinogenic effect. |
| R45 | May cause cancer. |

**SAFETY PHRASES**

| | |
|---|---|
| S23 | Do not breathe gas/fumes/vapour/spray (where applicable). |
| S24/25 | Avoid contact with skin and eyes. |
| S36/37 | Wear suitable protective clothing and gloves. |
| 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. |

**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 |
|---|---|---|---|
| DICHLOROMETHANE (METHYLENE CHLORIDE) | C-H2-Cl2 | 75-09-2 | 30-60% |
| LIQUEFIED PETROLEUM GAS (LPG) | C3H8/C3H6/C4H10 | 68476-85-7 | 30-60% |
| TOLUENE | C7-H8 | 108-88-3 | 10-30% |
| DYE | Not Available | Not Available | 1-10% |
| HYDROCARBON RESIN | Not Available | Not Available | 1-10% |

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## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

| Ingredient | Formula | CAS No. | Content |
|---|---|---|---|
| KAOLIN | H2-Al2-Si2-O8.H2O | 1332-58-7 | 1-10% |

## 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 the Poisons Information Centre 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 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 the Poisons Information Centre 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

**Flammability** Highly flammable. May evolve toxic gases (carbon oxides, hydrogen chloride, phosgene, hydrocarbons) when heated to decomposition. Vapours may form explosive mixtures with air. Eliminate all ignition sources including cigarettes, open flames, spark producing switches/tools, heaters, naked lights, pilot lights, mobile phones etc. when handling. Aerosol cans may explode when heated above 50°C. Heating the dry product (Teflon) above 280C causes evolution of toxic carbon oxides and fluorine gases. Avoid heating or welding materials containing or coated in teflon.

**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 aerosol can damaged or leaking, clear area of all unprotected personnel and ventilate. Use personal protective equipment. Use personal protective equipment. Eliminate all ignition sources. Take outdoors and allow to discharge. 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 cool, dry, well ventilated area, removed from heat & ignition sources, oxidising agents, acids, active metals, foodstuffs, out of direct sunlight and out of the reach of children. Ensure aerosol containers/ cans are adequately labelled, protected from physical damage and sealed when not in use. 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 |
| Methylene chloride | ASCC (AUS) | 50 | 174 | -- | -- |
| Kaolin (Inspirable dust) | ASCC (AUS) | -- | 10 | -- | -- |
| Kaolin (Respirable dust) | ASCC (AUS) | -- | 2 | -- | -- |

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| Ingredient | Reference | TWA | | STEL | |
|---|---|---|---|---|---|
| | | ppm | mg/m3 | ppm | mg/m3 |
| LIQUEFIED PETROLEUM GAS (LPG) | ASCC (AUS) | 1000 | 1800 | 1000 | 1800 |
| Toluene | ASCC (AUS) | 50 | 191 | 150 | 574 |

**Biological Limits**

| Ingredient | Reference | Determinant | Sampling Time | BEI |
|---|---|---|---|---|
| DICHLOROMETHANE (METHYLENE CHLORIDE) | ACGIH BEI | Dichloromethane in urine | End of shift | 0.3 mg/L |
| 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 |
| | ACGIH BEI | Toluene in blood | Prior to last shift of workweek | 0.05 mg/L |

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

**PPE** Wear splash-proof goggles and PVA or viton (R) 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) or an Air-line respirator.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|---|---|---|---|
| **Appearance** | ORANGE LIQUID (AEROSOL DISPENSED) | **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 heat, sparks, open flames and other ignition sources.

**Material to Avoid** Incompatible with oxidising agents (eg. hypochlorites), acids (eg. nitric acid), metals, heat and ignition sources.

**Hazardous Decomposition Products** May evolve toxic gases (carbon oxides, hydrogen chloride, phosgene, hydrocarbons) when heated to decomposition.

**Hazardous Reactions** Polymerization will not occur.

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## 11. TOXICOLOGICAL INFORMATION

**Health Hazard Summary** Toxic. Use safe work practices to avoid eye or skin contact and vapour inhalation. Dichloromethane is classified as possibly carcinogenic to humans (IARC Group 2B). When this product is used in small quantities the potential for over exposure is reduced. Chronic over exposure may cause kidney, liver and nerve damage. Individuals with heart disease are more susceptible to adverse cardiac effects.

**Eye** Severe irritant. Contact may result in irritation, lacrimation, pain, redness, conjunctivitis and corneal burns with possible permanent damage.

**Inhalation** Toxic - irritant. Over exposure may result in irritation of the nose and throat, coughing, nausea, dizziness and headache. High level exposure may result in breathing difficulties, anaesthesia, cardiac arrhythmias, pulmonary oedema, unconsciousness and possible respiratory failure. Chronic exposure may result in kidney, liver and CNS damage. If dry product is heated to decomposition, exposure to vapours/fumes may cause a flu-like illness called polymer fume fever.

**Skin** Irritant. Contact may result in drying and defatting of the skin, rash and dermatitis. May be absorbed through skin with harmful effects.

**Ingestion** Toxic. Ingestion may result in nausea, vomiting, abdominal pain, diarrhoea, fatigue, drowsiness and unconsciousness. Aspiration may result in chemical pneumonitis and pulmonary oedema. Ingestion is considered unlikely due to product form.

**Toxicity Data**

DICHLOROMETHANE (METHYLENE CHLORIDE) (75-09-2)
- LC50 (Inhalation): 52 g/m3 (rat)
- LCLo (Inhalation): 5000 ppm/2 hours (guinea pig)
- LD50 (Ingestion): 1600 mg/kg (rat)
- LD50 (Subcutaneous): 6460 mg/kg (mouse)
- LDLo (Ingestion): 357 mg/kg human (CNS effects)
- LDLo (Subcutaneous): 2700 mg/kg (rabbit)
- TCLo (Inhalation): 500 ppm/8 hours (human - euphoria)

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): 100 ppm (human)
- TDLo (Ingestion): 9 g/kg (6-15 day pregnant mouse - teratogenic)

## 12. ECOLOGICAL INFORMATION

**Environment** If dichloromethane released into the atmosphere will degrade by reaction with hydroxyl radicals (half life: 19 to 194 days). Dichloromethane evaporates from the near surface soil and water surface. Biodegradation is possible but will probably be quite slow when compared with the evaporation rate.

## 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

**Product Name** **CHEMSPOTMARKER SC-OM350**

**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**

PHOSGENE: When chlorinated hydrocarbons are exposed to excessive heat, toxic phosgene vapours may be evolved. The main hazard associated with phosgene is the lack of warning symptoms. At low concentrations, the sense of smell may become dulled. Therefore, there may be no immediate warning that dangerous concentrations are being inhaled. May cause pulmonary oedema, which is potentially fatal.

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.

IARC - GROUP 2B - POSSIBLE HUMAN CARCINOGEN: This product contains an ingredient which has demonstrated sufficient evidence to have been classified by the International Agency for Research into Cancer (IARC) as possibly carcinogenic to humans and whose use should be strictly monitored and controlled.

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.

COLOUR RATING SYSTEM: RMT has assigned all Chem Alert 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 Chem Alert 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.

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

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 MSDS, 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 MSDS.

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**End of Report**