

Material Safety Data Sheet



Product Name **CHEMSPOTMARKER SC-PM350**

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.heinemanelectric.com.au

Synonym(s) SC-PM350 - 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%

AMBER

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3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
KAOLIN	H ₂ -Al ₂ -Si ₂ -O ₈ .H ₂ O	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.
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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/m ³	ppm	mg/m ³
	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	PINK 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.

AMBER

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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/m ³ (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 µL/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.
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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



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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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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.

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.

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