

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name** **MAC SPRAYMARK**

**Synonyms** AEROSOL SPRAY PAINT, STENCIL & SPOT MARKER.

**Uses** IPermanent marker for Roads, Packaging,.Drums, Trees, Logs, Cut Timber, Contractor Survey & Horticultural Layout. Use when a bright , "permanent", fade free mark is required; on most surfaces and all weather conditions.

**Supplier Name** ARANDEE INDUSTRIES LTD

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**Emergency** **0800 CHEMCALL®** 080024362255 -24 hour service  
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## 2. HAZARDS IDENTIFICATION

**CLASSIFIED AS HAZARDOUS ACCORDING TO CRITERIA IN THE HS (MIN DEG OF HAZ) REGS 2001**  
**CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO NZS 5433**

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Formula	ACGIH TVL/STEL	CAS Number
ACETONE	15 - 25%	750 / 1000 ppm	67-64-1
BUTYL ACETATE	< 3%	150 / 200 ppm	123-86-4
V. M. & P NAPTHA	< 10%	300 / 400 ppm	674742-89-8
OTHER INGREDIENTS DETERMINED NOT TO BE HAZARDOUS	< 15%	Not Available	Not Available
CALCIUM CARBONATE	< 25%	10 mg/m3 / 15 mg/m3	471-34-1
TITANIUM DIOXIDE	< 3%	10 mg/m3 / 10mg/m3	13463-67-7
DIMETHYL ETHER	10 - 15%	1000 / 1000 ppm	115-10-6
LIQUEFIED PETROLEUM GAS (LPG)	10 - 15%	1500 / 1000 ppm	74-98-6 106-97-8

## 4. FIRST AID MEASURES

**Eye** Hold eyelids apart and flush continuously with water or sterile saline solution. Continue until advised to stop by the Poisons Information Centre, or for at least 15 minutes.

**Inhalation** If exposure occurs leave exposure area immediately. If irritation persists, seek medical attention.

**Skin** Gently flush affected areas with water. Seek medical attention if irritation develops.

**Ingestion** For advice, contact a Poisons Information Centre on 0800 764 766 (0800 POISON) or +643 479 7248 (New Zealand) or a doctor. If swallowed, do not induce vomiting. Ingestion is considered unlikely due to product form.

**Advice To Doctor** Treat symptomatically.

**First Aid Facilities** Eye wash facilities should be available.

## 5. FIRE FIGHTING MEASURES

**Flammability** Highly flammable. Vapours may form explosive mixtures with air. May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition. 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.

**5. FIRE FIGHTING MEASURES cont.**

**Fire and Explosion**

Highly flammable - explosive vapour. Evacuate area and contact emergency services. Toxic gases may be evolved when heated. Remain upwind and notify those downwind of hazard. Wear full protective equipment (see spill above) including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

**Extinguishing**

Dry agent, carbon dioxide, foam or water fog. Prevent contamination of drains or waterways, absorb runoff with sand or similar.

**Hazchem Code**

2Y

**6. ACCIDENTAL RELEASE MEASURES**

**Spillage**

If aerosol can damaged / leaking, ventilate and clear area of all unprotected personnel. Wear splash-proof goggles, PVC/rubber gloves, a Type A-Class P1 (Organic vapour and Particulate) respirator (where an inhalation risk exists) and coveralls. Collect and allow to discharge outdoors. Absorb residues with sand or similar and place in clean containers for disposal.

**7. HANDLING AND STORAGE**

**Handling**

Use safe work practices to avoid eye or skin contact and inhalation. Observe good personal hygiene. Prohibit eating, drinking and smoking in contaminated areas. Wash hands before eating. Remove contaminated clothing and protective equipment before entering eating areas.

**Storage**

Store in cool, dry, well ventilated area, removed from oxidising agents, acids, alkalis, direct sunlight, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should have appropriate fire protection.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Ventilation**

Do not inhale vapours. Use in well ventilated areas. In poorly ventilated areas, mechanical 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.

**Exposure Standards**

MAC SPRAYMARK)  
TWA : 184 ppm Manufacturer's recommendation

CALCIUM CARBONATE (471-34-1)  
ES-TWA : 10 mg/m3 - as dust (ACGIH)  
ES-STEL : 15 mg/m3 - Total dust (ACGIH)

LIQUEFIED PETROLEUM GAS (LPG) (68476-85-7)  
ES-TWA : 1000 ppm (1800 mg/m3)  
WES : 1000 ppm (1800 mg/m3)

HYDROTREATED HEAVY NAPHTHA (PETROLEUM) (64742-89-8)  
ES-STEL : 400 ppm (1800 mg/m3)

**PPE**

No personal protective equipment is normally required. Where an inhalation risk exists, wear a Type A-Class P1 (Organic vapour and Particulate) Respirator. With prolonged use, wear PVC or rubber gloves and splash-proof goggles or safety glasses.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION cont.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: COLOURED LIQUID (AEROSOL DISPENSED)  
 Odour: SWEET  
 pH: NOT AVAILABLE  
 Vapour Pressure: NOT AVAILABLE  
 Vapour Density: NOT AVAILABLE  
 Boiling Point: NOT AVAILABLE  
 Melting Point: NOT AVAILABLE  
 Evaporation Rate: NOT AVAILABLE  
 Solubility (water): INSOLUABLE  
 Specific Gravity: 0.80 - 0.82  
 % Volatiles: NOT AVAILABLE  
 Flammability: HIGHLY FLAMMABLE  
 Flash Point: < 20 C (Propellant)  
 Upper Explosion Limit: NOT AVAILABLE  
 Lower Explosion Limit: NOT AVAILABLE  
 Autoignition Temperature: NOT AVAILABLE

10. STABILITY AND REACTIVITY

**Reactivity** Incompatible with oxidising agents (eg. hypochlorites, peroxides), acids (eg. sulfuric acid), strong alkalis (eg. hydroxides), heat and ignition sources.

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

11. TOXICOLOGICAL INFORMATION

**Health Hazard Summary** Low to moderate toxicity. This product has the potential to cause adverse health effects with chronic or high level exposure. Use safe work practices (ie. do not overspray or contaminate non target areas) to avoid eye-skin contact and vapour inhalation.

**Eye** Irritant. Contact may result in lacrimation, irritation, pain, redness and conjunctivitis. Prolonged contact - corneal burns and possible permanent damage.

**Inhalation** Low to moderate irritant - low toxicity. Over exposure may result in mucous membrane irritation of the respiratory tract and sneezing. At high levels, pyrethrins may cause breathing difficulties (wheezing) and sensitisation with asthma like symptoms.

**Skin** Irritant. Prolonged contact may result in irritation, redness, rash, dermatitis and sensitisation. Toxic effects may result from skin absorption.

**Ingestion** Not applicable. Due to product form (aerosol container) ingestion is considered highly unlikely.

**Toxicity Data** ACETONE (67-64-1)  
 LC50 (Inhalation) : 4 hour Not Available (Rat)  
 LD50 (Skin) : 5800 mg/kg (Rat)  
 LD50 (Ingestion) : 4 hour Not Available (Rat)

V. M. & P. NAPTHA (64742-89-8)  
 LC50 (Inhalation) : 4 hour Not Available (rat)  
 LD50 (Skin) : 4 hour Not Available (rat)

**11. TOXICOLOGICAL INFORMATION cont.**

LD50 (Ingestion) : 4 hour Not Available (rat)

Dimethyl Ether (115-10-6)

LC50 (Inhalation) : 4 hours Not Available (rat)

LD50 (Ingestion) : 4 hours Not Available (rat)

**12. ECOLOGICAL INFORMATION**

**Environment** Limited ecotoxicity data was available for this product at the time this report was prepared. Ensure appropriate measures are taken to prevent this product from entering the environment.

**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 waste disposal legislation.

**14. TRANSPORT INFORMATION**

**Transport** Class 2.1 Flammable gas. Do not transport with chemicals of class; 1 (Explosives), 3 (Flammable liquids), 4.1 (Flammable solids), 4.2 (Spontaneously combustibles), 4.3 (Dangerous when wet), 5.1 (Oxidising agents), 5.2 (Organic Peroxides), 7 (Radioactives) and foodstuffs.

**UN Number** 1950  
**Shipping Name** AEROSOLS  
**DG Class** 2.1  
**Subsidiary Risk(s)** None Allocated  
**Packing Group** None Allocated  
**Hazchem Code** 2Y

**15. REGULATORY INFORMATION**

**Poison Schedule** A poison schedule number has not been allocated to this product using the criteria in The Toxic Substances Regulations 1983.

**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.

AEROSOL CANS may explode at temperatures approaching 50 C.

**ABBREVIATIONS:**

mg/m3 - Milligrams per cubic metre

ppm - Parts Per Million

TWA / ES - Time Weighted Average or Exposure Standard. pH - relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, where 0 is highly acidic and 14 is highly alkaline.

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

M - moles per litre, a unit of concentration.

16. OTHER INFORMATION cont.

IARC - International Agency for Research on Cancer. 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. Information provided by Risk Management Technologies is summarised for ease of use. Additional technical information is available by calling +64 9 579 5139.

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 MSDS report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

COLOUR RATING SYSTEM: Arandee MSDS reports are assigned a colour rating of Green, Amber or Red for the 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 Arandee MSDS 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 slight - moderate hazard and a Red colour rating indicates a moderate - high hazard.

**Report Reviewed** 19th March 2006

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**Report Status** Arandee MSDS reports are compiled from independent sources of information and are based on the latest chemical and toxicological research data available, in compliance with the relevant standards guidance notes and legislation.

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