

## Section 1 - Identification of Chemical Product and Company

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**Substance:** Water solution of ingredients.  
**Trade Name:** **Chemspray Antiscale**  
**Product Use:** For the control of scales and other insect pests in the home garden.  
**Creation Date:** **December 2002**  
**Revised:** **April 2008**

## Section 2 - Hazards Identification

### Statement of Hazardous Nature

This product is classified as hazardous according to the criteria of NOHSC Australia. (Xn harmful)

**Risk Phrases:** R22 Harmful if swallowed

**Safety Phrases:**

**SUSDP Classification:** S5

**ADG Classification:** 9 Miscellaneous Dangerous Goods

**Packaging Group:** III

**Other Names:** Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

**UN Number:** 3082

### Emergency Overview

**Physical Description & colour:** Clear amber liquid

**Odour:** Naphthalene-like odour.

**Major Health Hazards:**

### Potential Health Effects

#### Inhalation

Exposure to high concentration of the solvent vapour may be irritating to the respiratory tract. Inhalation of solvent vapour may cause headache and dizziness, anaesthetic effects and other central nervous system effects. Inhalation effects due to Maldison are unlikely. Inhalation of excessive amounts of spray mist may cause effects associated with cholinesterase inhibition.

#### Skin Contact:

Data suggests that this product may be absorbed through the skin and be harmful by skin absorption. Prolonged or repeated exposure to the solvents may cause defatting of skin which could lead to dermatitis. A chronic hazard may exist after repeated contact due to the solvent present. Major skin exposure may lead to health problems.

#### Eye Contact:

Data suggests that this product should present no significant problems to typical persons if used as intended.

#### Ingestion:

The relatively low oral toxicity of the active ingredient and hydrocarbons indicates that the hazard due to swallowing is low. However if the product enters the lungs, for instance if vomiting occurs, the solvents present may cause pulmonary pneumonitis.

**Acute Over Exposure:** Headache, nausea due to solvent and salivation, diarrhoea, twitching, vomiting and convulsions from active ingredient.

#### Carcinogen Status:

**NOHSC:** No significant ingredient is classified as carcinogenic by NOHSC.

**NTP:** No significant ingredient is classified as carcinogenic by NTP.

**IARC:** No significant ingredient is classified as carcinogenic by IARC.

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## Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc, %	TWA (mg/m3)	STEL (mg/m3)
Maldison	121-75-5	10	10	not set
Non hazardous hydrocarbons	secret	80	not set	not set
Non hazardous detergents	secret	to 100	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

*The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.*

## Section 4 - First Aid Measures

### General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call.

Safety deluge showers should be provided where this product is being used.

**Inhalation:** No first aid measures normally required. However, if vapours or mists have been inhaled, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

**Skin Contact:** If product gets on skin, immediately remove contaminated clothing and wash skin thoroughly with soap and water to remove material. If you begin to feel unwell, seek medical attention.

**Eye Contact:** If product gets in eyes, wash eyes to remove material. No further measures should normally be required.

**Ingestion:** If swallowed, do NOT induce vomiting. Give a glass of water.

**Advice to Doctor:** The product contains Maldison, a cholinesterase inhibitor. Atropine treatment may be required or treat with up to 10mg of IV diazepam, curare therapy is contraindicated. Treat pulmonary pneumonitis secondary to pulmonary oedema. Do not give adrenergic amines, aminophylline, succinylcholine, phenothiazines or reserpine alkaloids or oils.

## Section 5 - Fire Fighting Measures

**Fire and Explosion Hazards:** There is a slight risk of an explosion from this product if it is involved in a fire. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

**Extinguishing Media:** Carbon dioxide, dry chemical, foam, water fog. Water fog or fine spray is the preferred medium for large fires.

**Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade. Immediately evacuate the area of unnecessary personnel. When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat, goggles and self contained breathing apparatus. All skin areas should be covered. Ensure that no spillage enters drains or water courses.

**Flash point:** 76°C.

**Upper Flammability Limit:** 7.0%

**Lower Flammability Limit:** 0.6%

**Auto ignition temperature:** Not known

**Flammability Class:** C1 combustible liquid

**Unusual Fire & Explosion Hazards:** Fire decomposition products from this product may form toxic and corrosive mixtures in confined spaces. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances.

**Decomposition Products:** Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Oxides of sulfur. Oxides of phosphorus. Water.

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## Section 6 - Accidental Release Measures

**Accidental release:** Minor spills do not normally need any special cleanup measures. In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear overalls, goggles and gloves. Suitable materials for protective clothing include rubber, PVC. Eye/face protective equipment should comprise as a minimum, protective glasses and, preferably, goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

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## Section 7 - Handling and Storage

**Handling:** Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

**Storage:** This product is a S5 Poison. Observe all relevant regulations regarding sale, transport and storage of this class of product. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames, and make sure that the product does not come into contact with substances listed under "Materials to avoid" below.

Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label.

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## Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

Exposure Limits	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	ADI (mg/Kg/day)	NOEL (mg/Kg/day)
Maldison	10	not set	0.02	2

*The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. See ingredients section on page 1 of this data sheet.*

*ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, Dec 2003.*

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

**Ventilation:** No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that vapours and mists are minimised.

**Eye Protection:** Eye protection such as protective glasses or goggles is recommended when this product is being used.

**Skin Protection:** Impermeable protective gloves should be worn when you are using this product, since absorption through the skin is harmful. Clean overalls or protective clothing should be worn, preferably with an apron. Consult For help in selecting suitable equipment, consult AS 2161.

**Protective Material Types:** Neoprene: excellent. Rubber: fair. Nitrile: excellent. Butyl: fair.

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**Respirator:** Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

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## Section 9 - Physical and Chemical Properties:

<b>Physical Description &amp; colour:</b>	Clear, amber liquid
<b>Odour:</b>	Naphthalene-like odour.
<b>Boiling Point:</b>	no data
<b>Freezing/Melting Point:</b>	Liquid at normal temperatures.
<b>Flashpoint:</b>	76°C
<b>Volatiles:</b>	Expected to be low at 100°C.
<b>Vapour Pressure:</b>	no data
<b>Vapour Density:</b>	no data
<b>Specific Gravity:</b>	1.07
<b>Water Solubility:</b>	Emulsifiable
<b>pH:</b>	no data.
<b>Volatility:</b>	no data.
<b>Odour Threshold:</b>	no data.
<b>Evaporation Rate:</b>	no data.
<b>Coeff Oil/water distribution:</b>	no data
<b>Autoignition temp:</b>	no data
<b>Corrosiveness:</b>	Not corrosive.

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## Section 10 - Stability and Reactivity

**Reactivity:** This product is unlikely to react or decompose under normal storage conditions.

**Conditions to Avoid:** Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

**Incompatibilities:** Strong oxidising agents. Do not mix with Bordeaux or any other alkaline mixtures

**Fire Decomposition:** Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Oxides of sulfur. Oxides of phosphorus. Water.

**Polymerisation:** This product is unlikely to undergo polymerisation processes.

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## Section 11 - Toxicological Information

### Toxicity Data

MALATHON (121-75-5)

LC50 (Inhalation : 43790 ug/m<sup>3</sup>/4hrs (rat)

LD50 (Skin): 2330 mg/kg (mouse)

LD50 (Ingestion: 190 mg/kg (mouse)

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## Section 12 - Ecological Information

**Environment** Organophosphates are highly toxic to birds, mammals and fish. Bioaccumulation is unlikely as these chemicals would kill the organism before it would be taken into the tissues. Even when these chemicals are taken up by fish, they seldom persist for more than a week.

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## Section 13 - Disposal Considerations

**Disposal:** Instructions for the disposal of containers is found on the product label.

## Section 14 - Transport Information

This product is classed as UN3082, Dangerous Goods Class 9 Miscellaneous Dangerous Goods. Proper Shipping name is ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.. Class 9 Miscellaneous Dangerous Goods shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 5.1 (Oxidising Agents where the Miscellaneous Dangerous Goods are Fire Risk Substances), 5.2 (Organic Peroxides where the Miscellaneous Dangerous Goods are Fire Risk Substances). They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.1 (Flammable Gases), 2.2 (Non-Flammable, Non-Toxic Gases), 2.3 (Poisonous Gases), 3 (Flammable liquids), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents except where the Miscellaneous Dangerous Goods are Fire Risk Substances), 5.2 (Organic Peroxides except where the Miscellaneous Dangerous Goods are Fire Risk Substances), 6 (Poisonous Substances), 7 (Radioactive Substances), 8 (Corrosive Substances), Foodstuffs and foodstuff empties.

This product is a S5 Poison. Observe all relevant regulations regarding sale, transport and storage of this class of product.

## Section 15 - Regulatory Information

**AICS:** All of the significant ingredients in this formulation are to be found in the public AICS Database. Malathon is mentioned in the SUSDP.

## Section 16 - Other Information

**This MSDS contains only safety-related information. For other data see product literature.**

### Acronyms:

<b>ADG Code</b>	Australian Code for the Transport of Dangerous Goods by Road and Rail
<b>AICS</b>	Australian Inventory of Chemical Substances
<b>CAS number</b>	Chemical Abstracts Service Registry Number
<b>Hazchem Number</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>IARC</b>	International Agency for Research on Cancer
<b>NOHSC</b>	National Occupational Health and Safety Commission
<b>NOS</b>	Not otherwise specified
<b>NTP</b>	National Toxicology Program (USA)
<b>R-Phrase</b>	Risk Phrase
<b>SUSDP</b>	Standard for the Uniform Scheduling of Drugs & Poisons
<b>UN Number</b>	United Nations Number

*THIS MSDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS MSDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.*

*IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.*

Please read all labels carefully before using product.

This MSDS is prepared in accord with the NOHSC document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2011(2003)]  
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## MATERIAL SAFETY DATA SHEET