



# SUPERWAY GARDEN AG & PEST PRODUCTS PTY

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## MATERIAL SAFETY DATA SHEET

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### 1 IDENTIFICATION

Product Name	<b>Superway Dimethoate 400 Systemic Insecticide</b>
Chemical Name	Dimethoate
Chemical Class	Organophosphorus Pesticide
Hazchem Code	3W
UN No	3017
Dangerous Goods Code	6.1
Sub.Risk Class	3
Packaging Group	III
EPG	
Poison Schedule	S6
Use	A systemic liquid pesticide concentrate for application according to label instructions.

### Physical Appearance and Properties.

Appearance and Odour	Clear water-white appearance with characteristic odour.
Boiling Point and	156 degrees C
Vapour Pressure	
Volatile Component	No specific data, however expected to be low at 100oC.
Flash point	42degrees C.
Specific Gravity	1.08

Ingredients	CAS No.	g/l
Dimethoate	60-51-5	400 g/l
Cyclohexanone	108-94-1	575 g/l
Other inert ingredients	not hazardous	70 g/l

## 11 HEALTH HAZARD DATA

### Health effects.

If exposure has been excessive over long periods some effects on the liver and blood may be evident. Dimethoate is unlikely to accumulate in tissues, and is degraded and eliminated from the body within a few days. The ingredients are not listed as carcinogenic in Worksafes's document "exposure Standards for Atmospheric Contaminants in the occupational Environment".

### Acute:

The product may cause skin and eye irritation. The active ingredient is readily absorbed through the skin and eyes. Prolonged or repeated exposure may cause defatting of skin, which could lead to secondary dermatitis from the action of the solvent and surface-active agents. Dimethoate is not considered a skin sensitiser. Inhalation of solvent may cause headache, nausea, and intoxication. Inhalation of spray mists may cause effects due to dimethoate.

Acute over exposure: Headache, dizziness, nausea, salivation, vomiting, diarrhea, slowing of heartbeat, twitching spasms.

**Swallowed:** Product is toxic if swallowed. Ingestion of small quantities may cause harm and larger quantities may lead to death.

**Eye** Mildly irritating to eyes. It is likely to cause mild discomfort such as watering and redness of the eyes. This should quickly disappear when exposure is over.

**Skin** This product can be absorbed through the skin and is toxic by skin absorption. Major skin exposure may lead to serious health problems and even death if not treated promptly.

**Inhalation** Avoid breathing spray as product is harmful if inhaled. Minor or short-term exposure may lead to short term health problems, although long term exposure may lead to permanent health problems.

### FIRST AID

Atropine tablets 0.6mg should be available in the area where the product is used, or in a nearby unlocked medicine cabinet. Safety deluge showers should be provided where this product is being used.

If poisoning occurs, contact a doctor or Poisons Information Centre (Telephone 131126) and follow the advice given. Provide a copy of this Safety Data sheet to Doctor if possible.

### SWALLOWED

Give 1 atropine tablet every 5 minutes until dryness of the mouth occurs- If poisoned by skin absorption or through lungs, remove any contaminated clothing and wash skin thoroughly and give atropine tablets as above. Get to a doctor or hospital quickly.

**EYE** Immediately irrigate with plenty of water for at least 15 minutes. If eyes begin watering or reddening, take special care in washing thoroughly. Seek medical assistance.

**SKIN** Remove contaminated clothing and shoes. Wash affected areas of skin with plenty of soap and water for at least 15 minutes. Seek medical assistance. If a safety shower is available, use it promptly. Because of the toxicity of this product, speed may save a life. Launder contaminated clothing before re-using.

**INHALATION**

Remove patient to fresh air and allow them to rest and keep warm. Loosen clothing. If irritation or symptoms persist after 30 minutes, seek medical advice.

**ADVISE TO DOCTOR**

This product is a cholinesterase inhibitor. Atropine treatment may be necessary along with 1g IV Pralidoxime for profound weakness or muscle twitching- curare therapy is contraindicated. Do NOT give adrenergicamines, aminophylline, succinylcholine, phenothiamines, or reserpine alkaloids or oils. Treat pulmonary pneumonitis and bronchopneumonia secondary to pulmonary oedema.

**TOXICITY DATA:**

**Animal toxicity**

<b>(product)</b>	Oral LD <sub>50</sub> (mg/kg)	400-500	Species: Rat
	Dermal LD <sub>50</sub> (mg/kg)	>2,000	Species: Rat
	Inhalation LC <sub>50</sub> (mg/L)	3 (4 hour)	Species: Rat

**Environmental/  
Ecological**

LC <sub>50</sub>	6.2ppm (96 hr)	Species Rainbow Trout
LD <sub>50</sub> (duck)	42 mg/kg	
LD <sub>50</sub> (quail)	>10,000 mg/kg	
Toxic to bees		

**111 PRECAUTIONS FOR USE**

Dimethoate is flammable and harmful if inhaled. It is toxic if in contact with skin or if swallowed.

**Exposure standards**

A time weighted average (TWA) has been established for Cyclohexanone, present in this product. This value is 100mg/m<sup>3</sup>. The corresponding Short term exposure limit (STEL) is not "set". The STEL is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated

for more than 15 minutes 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. An exposure standard has not been established for Dimethoate. The acceptable daily intake for Dimethoate is set at 0.02 mg/kg/day. The corresponding No observable effect limit is set at 0.02mg/kg/day. Values taken from Australian ADI list, May 1995.

### **Engineering controls**

In industrial situations, concentration values below the TWA value should be maintained. Values may be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify the process or environment to reduce the problem.

### **Personal protection**

When opening the container and preparing spray wear cotton overalls buttoned to neck and wrist , a washable hat, elbow length PVC gloves, face shield and impervious footwear and half facepiece respirator with combined dust and gas cartridge.

Respiratory protection: if there is a significant chance of dusts, vapours or mist accumulating in the area where this product is being used , a mask or respirator should be used . For help in selecting suitable equipment consult AS/NZS1715.

Protective Gloves: Impermeable protective gloves must be worn when you are using this product, since absorption through the skin is likely to lead to serious harm. All skin areas should be covered. Glove selection can be made on the basis of the following resistance for Cyclohexanone based products. Neoprene: fair Rubber excellent. Nitrile fair .Butyl: Good > For help in selecting suitable equipment, consult AS 2161.

Eye Protection: Protective eyewear is suggested when using this product . It is always prudent to use protective eyewear. Consult AS 1336 and AS/NZS 1337 for advice on industrial eye protection.

Clothing: Clean impermeable overalls or protective clothing should be worn, preferably with an apron. If contaminated, laundry should be advised of the nature of the contamination, or, preferably, clothing should be destroyed. Consult AS 2919 for advice on industrial clothing.

Safety Boots: Wearing safety boots in industrial situations is advisory. Consult AS/NZS2210 for advice on Occupational Protective Footwear.

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

<b>Eyes</b>	Wear face shield
<b>Clothing</b>	When preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat.
<b>Gloves</b>	Elbow length PVC gloves

**Respiratory** Wear a suitable respiratory mask while spraying.

**General** Do not eat drink or smoke until after washing. Wash thoroughly after handling. Launder all contaminated clothing including gloves and face shield.

#### **IV SAFE HANDLING INFORMATION**

Safety Phrases are S16, S20, S38. Keep away from sources of ignition- No smoking , When using , do not eat or drink. Wear suitable protective clothing. Incase of insufficient ventilation , wear suitable respiratory equipment.

#### **Storage and Transport**

This product is classified as UN 3017, Dangerous Goods Class 6 Toxic substance. Proper shipping name is ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE. Class 6 Toxic Substance shall not be loaded in the same vehicle or packed in the same freight container with class 1 (Explosives), 3 ( Flammable liquids the flammable liquid is nitromethane ), 5.1 Oxidising agents where the Poisonous Substances are a Fire Risk Substances), 5.2 (organic Peroxides where the Poisonous substances are Fire Risk Substances), 8 (Corrosive Substances where the Poisonous substances are cyanides and the corrosives are Acids ) Foodstuffs and Foodstuff empties. They may however be loaded in the same vehicle or packed in the same container with classes, 2.1 (Flammable Gases) 2.2 (Non-Flammable, Non Toxic Gases) 2.3 (Poisonous Gases), 3 (Flammable Liquids, except where flammable liquid is nitromethane ) 4.1 (Flammable Solids, 4.2 (Spontaneously Combustible Substances) 4.3 ( Dangerous When wet substances), 5.1 Oxidising agents except where the poisonous Substances are Fire Risk Substances), 5.2 Organic Peroxides except where the poisonous substances are fire risk substances), 7 (Radioactive substances ), 8 (Corrosive Substances except where the poisonous substances are cyanides and the Corrosive are acids), 9 (Miscellaneous Dangerous Goods)

The product is a S6 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.

#### **SPILLS AND DISPOSALS**

In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Immediately call the fire brigade. Wear full protective chemically resistant clothing including face mask, face shield , gauntlets and self contained breathing apparatus. See above under Personal protection regarding Australian Standards relating to personal protective equipment. Stop leak if safe to do so, and contain spill. Absorb onto sand , vermiculite or other suitable absorbent material. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage. After spills, Wash

area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is and conflict between this MSDS and the label, instructions on the label prevail, Dispose of only in accord with all regulations. Advise Laundry of nature of contamination when sending contaminated clothing to the laundry.

## **Fire and Explosion Hazard**

There is a moderate risk of explosion from this product if it is involved in a fire. Firefighters should take care and appropriate precautions.

Flashpoint 42degrees C (PMCC)

Flammable Limits: Upper Value:9.4%: Lower Value:1.3%

Extinguishing media: carbon Dioxide, dry chemical, foam water or fog.

Special Fire Fighting procedures: If a significant quantity of this product in 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 and water courses.

Unusual Fire and Explosion Hazards: Fire decomposition products from this product may form toxic and corrosive mixtures in confined places. 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.

Stability: This product is unlikely to spontaneously decompose.

Polymerisation: This product is unlikely to spontaneously polymerise.

Decomposition Products: Carbon Dioxide, and if combustion is incomplete, carbon monoxide and smoke. Oxides of Phosphorous. Water.

Materials to Avoid: Strong Acids, Strong bases and strong oxidising agents.

## **V OTHER INFORMATION**

### **CONTACT POINTS:**

<b>Poisons information centre</b>	<b>Telephone</b>	<b>131126</b>
<b>Superway Garden Products</b>		
<b>Pty Ltd Head Office</b>	<b>Telephone</b>	<b>07 54 390355</b>
	<b>Fax</b>	<b>07 54 390366</b>
	<b>Email</b>	<a href="mailto:msd@superway.com.au">msd@superway.com.au</a>

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