



# DAVID GRAY & CO PTY LIMITED

A.C.N. 008 671 127

2 Rawlinson Street O'Connor PO Box 2084 Palmyra DC  
Western Australia 6961

Ph (08) 9337 4933 Fax (08) 9337 8316

Internet: [www.davidgray.com.au](http://www.davidgray.com.au) (MSDS's & Company Information)  
Emergency Telephone Number (08) 9337 4933 (During Office Hours)

Date of Issue: September 2009

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## MATERIAL SAFETY DATA SHEET

### IDENTIFICATION

HAZARDOUS ACCORDING TO CRITERIA OF WORKSAFE AUSTRALIA

**PRODUCT NAME:** David Grays Carbaryl Garden Insecticide

**OTHER NAME:** None allocated  
**MANUFACTURERS CODE:** 200206  
**PROPER SHIPPING NAME (ADG Code):** Carbamate Pesticide, Liquid, Toxic (Carbaryl)  
**UN NUMBER:** 2992  
**DANGEROUS GOODS CLASS:** 6.1  
**SUBSIDIARY-RISK:** None allocated  
**PACKING GROUP:** III  
**HAZCHEM CODE:** 2X  
**POISONS SCHEDULE:** 6 Poison  
**USE:** Controls Grasshoppers, Caterpillars, Beetles and Bugs

### PHYSICAL DESCRIPTION / PROPERTIES

**APPEARANCE:** White/creamy viscous liquid  
**MELTING POINT:** Not applicable  
**BOILING POINT:** Not applicable  
**VAPOUR PRESSURE:** Not applicable  
**DENSITY:** 1.04g/mL  
**FLASH POINT:** Not applicable  
**FLAMMABILITY LIMITS:** Not applicable  
**SOLUBILITY IN WATER:** Dispersers in water  
**CORROSIVENESS:** Not corrosive  
**OTHER PROPERTIES:** Not applicable

### INGREDIENTS

CHEMICAL NAME	CAS.NO.	PROPORTION
Carbaryl	63-25-2	100g/L
Ingredients determined not hazardous		To 100%

## HEALTH HAZARD INFORMATION

### HEALTH EFFECTS

**HAZARD CLASSIFICATION (In accordance with criteria of Worksafe Australia):** Xn - Harmful

**RISK PHRASES:** R22 – Harmful if swallowed

**SAFETY PHRASES:** S2 – Keep out of reach of children  
S24 – Avoid contact with skin

#### **GENERAL:**

No adverse health effects are expected when the product is used in accordance with label directions. If mishandled (excessive exposure) may cause carbamate cholinesterase inhibition. Poisoning symptoms include headaches, dizziness, nausea, diarrhoea, incoordination, muscle twitching, tremors, abdominal cramps, tightness in chest, sweating, blurred vision, salivation, excessive urination and convulsions.

#### **ACUTE**

##### **SWALLOWED:**

The acute oral toxicity is Moderate. Oral LD50 (rat) 850mg/kg (Carbaryl).  
For product Oral LD50 (rat) 2300mg/kg

##### **EYE:**

Moderate eye irritant.

##### **SKIN:**

The acute dermal toxicity is low, however repeated exposure may result in absorption of harmful amounts. Repeated skin contact may cause allergic reactions.  
Dermal LD50 (rat) 4000mg/kg (carbaryl).  
For product LD50 10800mg/kg.

##### **INHALED:**

The acute inhalation toxicity is moderate. Excessive exposure to dust may be harmful. Prolonged exposure to the dust may cause eye and respiratory irritation, dizziness and headaches.  
Inhalation LD50 (rat) = Not available mg/m<sup>3</sup> (4 hours) (carbaryl).

##### **CHRONIC:**

Carbaryl does not cause generic change or accumulate in the body. Long term carcinogenicity studies of the active ingredient, Carbaryl has shown to be negative.  
Avoid prolonged or repeated skin contact.

## FIRST AID

### GENERAL:

In every case of suspected poisoning contact a doctor or a Poisons Information Centre immediately.

### SWALLOWED:

Seek medical attention immediately. Do not induce vomiting. It is also recommended to give a slurry of activated charcoal to absorb the product swallowed. If more than 15 minutes from medical assistance, give one atropine tablet every 5 minutes until dryness of mouth occurs then seek medical attention immediately.

**NOTE:** Do not give fluids/tablets or induce vomiting if patient is unconscious or convulsing.

### EYE:

Hold eyelids open and flush eyes with water for at least fifteen minutes. Seek medical attention immediately.

### SKIN:

Immediately remove contaminated clothing and wash skin thoroughly with soap and water for at least fifteen minutes. If symptoms of poisoning occur give atropine tablets as above and seek medical attention immediately.

### INHALED:

Immediately remove patient to fresh air. If difficulty in breathing is experienced, give oxygen and artificial respiration if necessary.

### FIRST AID FACILITIES:

Soap, water, Activated charcoal, Atropine tablets.

### ADVICE TO DOCTOR:

Carbaryl is a carbamate, a cholinesterase inhibitor. Preferred antidote: atropine by injection or atrovent/ipratropium by airway puff.

## PRECAUTIONS FOR USE

### EXPOSURE STANDARDS:

Worksafe Occupational Exposure Standard (TWA – Time Weighted Average)  
Carbaryl 5mg/m<sup>3</sup>

Time Weighted Average (TWA) means the average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

### ENGINEERING CONTROLS:

Use only in a well ventilated area.

### PERSONAL PROTECTION:

When handling the product, preparing and using spray wear;

Chemical resistant overalls with hood, buttoned to the neck.

Elbow length PVC neoprene or nitrile gloves.

Goggles.

Half faced respirator with combined dust/toxic gas cartridges.

After use, remove contaminated clothing immediately and wash thoroughly. Wash hands, face and arms immediately and before eating, drinking or smoking.

### FLAMMABILITY:

Not flammable.

## SAFE HANDLING INFORMATION

### STORAGE

Store product in original container only in a locked, well-ventilated area, out of direct sunlight and away from any ignition sources. Keep away from foodstuffs.

### TRANSPORT

Product is classified as a dangerous good in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail.

**CORRECT SHIPPING NAME:** Carbamate insecticide liquid, toxic, (Carbaryl)

**UN NUMBER:** 2992

**DANGEROUS GOODS CLASS:** 6.1

**SUB-CLASS:** Not applicable

**PACKING GROUP:** III

### SPILLAGE

Wear appropriate clothing while cleaning up spill (see Personal Protection). Prevent entry into drainage systems, waterways, rivers, etc. Apply absorbent material such as sand, earth or attapulgit to contain the spill. Sweep up the material when absorption is complete. If product spilt indoors, wash contaminated surfaces with a mild bleach solution (sodium hypochlorite).

### DISPOSAL

Disposal of contaminated material must be done in accordance with State and/or Local regulations. Triple rinse containers with water and add rinsings to tank mix. Destroy empty containers by breaking, crushing or puncturing them. Dispose of the empty containers at a local authority landfill. Do not burn empty containers or product. Do not allow chemical containers, spray or washings to contaminate drains, sewers, streams, ponds or any waterway.

### FIRE/EXPLOSION HAZARD

Product not flammable or explosive.

### HAZARDOUS DECOMPOSITION PRODUCTS:

Decomposition of carbaryl may be hazardous under fire conditions, toxic irritating gases may be formed such as NO<sub>x</sub> at temperatures above 160°C.

### FIRE FIGHTING EQUIPMENT:

Foam, carbon dioxide (CO<sub>2</sub>), or dry chemical extinguishers may be used. Run-off must be contained.

## OTHER INFORMATION

### ECOTOXICITY DATA:

Carbaryl is highly toxic to fish and bees and moderately toxic to pets and livestock. Carbaryl does not bioaccumulate in animal systems.

### ENVIRONMENTAL FATE:

In soil Carbaryl is readily degraded by hydrolysis and microbial action. Bio chemical degradation is highly accelerated in alkaline soils, depending on climatic conditions and soil types.

## CONTACT POINT

**TITLE:** Technical Department

**TELEPHONE NUMBER:** (08) 9337 4933

**AUTHORISED:** Production Chemist

**DATE:** 11<sup>th</sup> September 2009

### NOTICE:

This Material Safety Data Sheet has been developed according to the Worksafe Australia/NOHSC Codes of Practice.

The information contained herein is given in good faith however and is considered to be accurate at the specified issue date. No warranty expressed or implied is made to the accuracy or completeness of the data and information contained herein.

No person, other than an authorised representative of David Gray & Company Pty Ltd, has the authority to make any alterations to this MSDS.

Contact David Gray & Co Pty Limited for further product information on (08) 9337 4933 during normal business hours.