

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

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MATERIAL SAFETY DATA SHEET

Product Name DAVID GRAYS DISULFOTON 50 GRANULAR INSECTICIDE

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name DAVID GRAY & CO PTY LIMITED

Address 2 Rawlinson Street, O'Connor WA, 6163, AUSTRALIA

Telephone (08) 9337 4933

Fax (08) 9337 8316

Emergency (08) 9337 4933 (B/H)

Email / Web tradecentre@davidgray.com.au

Synonyms DISULFOTON 50.

Uses PESTICIDE.

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

Risk And Safety Phrases

Risk and Safety Phrases are standardised phrases allocated to Hazardous Substances. Risk phrases convey a general description of the physicochemical, environmental and health hazards of a substance. Safety phrases provide information on safe storage, handling, disposal, personal protection and first aid.

RISK PHRASES

R24/25 Toxic in contact with skin and if swallowed.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY PHRASES

S28 After contact with skin, wash immediately with plenty of water.

S36/37 Wear suitable protective clothing and gloves.

S45 In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre immediately (show the label where possible).

S60 This material and its container must be disposed of as hazardous waste.

S61 Avoid release to the environment. Refer to special instructions / safety data sheets.

3. COMPOSITION / INFORMATION ON INGREDIENTS

 Ingredient
 Formula
 Conc.
 CAS No.

 DISULPHOTON
 C8-H19-O2-P-S3
 5%
 298-04-4

 INERT FILLERS
 95%
 Not Available

4. FIRST AID MEASURES

Eye Flush gently with running water. Seek medical attention if irritation persists.

Inhalation If over 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 13 11 26 (Australia Wide) or a doctor.

Colour Rating AMBER

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4. FIRST AID MEASURES cont.

Advice To Doctor

Treat symptomatically.

First Aid **Facilities**

Eye wash facilities and safety shower are recommended.

5. FIRE FIGHTING MEASURES

Flammability Non flammable. May evolve toxic gases (carbon/sulphur/phosphorus/nitrogen oxides) when heated to

decomposition.

Fire and **Explosion** Non flammable. Evacuate area and contact emergency services. Toxic gases (carbon/ nitrogen/ phosphorus/ sulphur oxides) 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 Non flammable. Prevent contamination of drains or waterways, absorb runoff with sand or similar.

Hazchem Code 2X

6. ACCIDENTAL RELEASE MEASURES

If spilt (bulk), contact emergency services if appropriate. Wear dust-proof goggles, PVA/rubber gloves, a Class P1 (Particulate) respirator (where an inhalation risk exists), coveralls and rubber boots. Clear area of all unprotected personnel. Prevent spill entering drains or waterways. Collect and place in sealable containers for disposal or reuse. Avoid generating dust.

7. HANDLING AND STORAGE

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 (eg. if container is damaged).

Storage

Store out of direct sunlight and out of the reach of children, in a cool, dry area, removed from moisture, oxidising agents, acids, alkalis, iron, mild/galvanised steel, zinc, heat sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Large storage areas should have appropriate fire protection.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation Ensure adequate natural ventilation. Maintain dust levels below the recommended exposure standard.

Standards

Exposure DISULPHOTON (298-04-4) ES-TWA: 0.1 mg/m3

WES-TWA: 0.1 mg/m3

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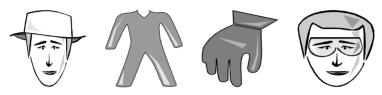
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8. EXPOSURE CONTROLS / PERSONAL PROTECTION cont.

PPE Wear coveralls, a washable hat, dust-proof goggles and PVC or rubber gloves. When using large quantities or where heavy contamination is likely, wear full-length PVC or full-length rubber gloves. Where an inhalation risk exists, wear a Class P1 (Particulate) Respirator. At high dust levels, wear a Class P3 (Particulate) respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: PALE BROWN GRANULAR SOLID

Odour: SULPHUR ODOUR
pH: NOT AVAILABLE
Vapour Pressure: 24 mPa (Disulphoton)
Vapour Density: NOT AVAILABLE
Boiling Point: 128 C (Disulphoton)
Melting Point: NOT AVAILABLE
Evaporation Rate: NOT AVAILABLE

Evaporation Rate: NOT AVAILABLE
Solubility (water): INSOLUBLE
Specific Gravity: NOT AVAILABLE
% Volatiles: NOT AVAILABLE
Flammability: NON FLAMMABLE
Flash Point: NOT RELEVANT
Upper Explosion Limit: NOT RELEVANT
Lower Explosion Limit: NOT RELEVANT
Autoignition Temperature: NOT AVAILABLE

10. STABILITY AND REACTIVITY

Reactivity Incompatible with alkalis, oxidising agents, acids, iron, zinc, stainless/galvanised steel and heat sources.

Decomposition Products May evolve toxic gases (carbon/sulphur/phosphorus/nitrogen oxides) when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary Toxic - irritant. This product has the potential to cause acute and chronic health effects. Avoid eye or skin contact and dust generation or inhalation. Cholinesterase inhibitor with the potential for depression of plasma and red cell cholinesterase activity. Symptoms are often characterised as short acting yet having complete and rapid reversibility.

Eye Irritant. Exposure may result in irritation, lacrimation, pain, redness and blurring or dimness of vision.

Inhalation

Toxic. Over exposure to dust (liquid if dissolved) may result in irritation of the nose and throat, coughing, weakness, nausea, vomiting and diarrhoea. At high levels; dizziness, incoordination, excessive salivation, sweating and breathing difficulties. Cholinesterase inhibitor.

Skin Irritant. Contact may result in itching, pain, redness and skin rash. Toxic effects reported through skin absorption.

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11. TOXICOLOGICAL INFORMATION cont.

Ingestion Toxic, Ingestion may result in nausea, vomiting, abdominal pain, diarrhoea, fatigue, and profuse sweating and/or

salivation. Large doses may result in breathing difficulties, muscle spasms, and convulsions.

DISULPHOTON (298-04-4) Toxicity Data

LC50 (Inhalation): 200 mg/m3 (rat) LD50 (Skin): 6 mg/kg (rat) LD50 (Ingestion): 2600 ug/kg (rat)

Health Surveillance: Required [NOHSC:1005(1994)]

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.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

For small amounts, the best way to dispose of the product is to use it in accordance with label directions. Larger

amounts must be disposed of at an approved waste treatment facility. Disposal

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

Class 6.1 Toxic. Do not transport with chemicals of class; 1 (Explosives), 3 (Flammable liquids), 5.1 (Oxidising **Transport**

agents), 5.2 (Organic peroxides), 8 (Corrosives - where the Corrosive is an acid and the Toxic is a cyanide) and

foodstuffs.

UN Number 2783

Shipping Name ORGANOPHOSPHORUS PESTICIDE, SOLID, TOXIC

DG Class

Subsidiary None Allocated

Risk(s)

Packing Group Ш **Hazchem Code** 2X

IMDG

UN Number 2783 **DG Class** 6.1

Subsidiary None Allocated

Risk(s)

Packing Group III

IATA

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14. TRANSPORT INFORMATION cont.

UN Number 2783 DG Class 6.1

Subsidiary None Allocated

Risk(s)

Packing Group

Inhalation

Packing Group

None Allocated

15. REGULATORY INFORMATION

AICS All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

Classified as a Schedule 6 (S6) Poison using the criteria in the Standard for the Uniform Scheduling of Drugs and Schedule Poisons (SUSDP).

16. OTHER INFORMATION

Information

Additional RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

> ORGANOPHOSPHATES-CARBAMATE PESTICIDES-LARVICIDES: These agents act by combining with and inactivating the enzyme acetylcholinesterase (an enzyme involved in nerve muscle coordination). The inhibition of the cholinesterase appears to be reversible following cessation of exposure at sub lethal concentrations (acute exposure). The principal manifestations of poisoning with cholinesterase inhibitor pesticides are visual disturbances, respiratory difficulty and gastrointestinal hyperactivity.

> COLOUR RATING SYSTEM: Chem Alert 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 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.

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.

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.

ABBREVIATIONS:

mg/m3 - Milligrams per cubic metre ppm - Parts Per Million

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16. OTHER INFORMATION cont.

TWA/ES - Time Weighted Average or Exposure Standard.

CNS - Central Nervous System NOS - Not Otherwise Specified

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.

IARC - International Agency for Research on Cancer.

Report Reviewed 22nd May 2006

Date Printed

22nd May 2006

Report Status

Chem Alert reports are compiled as an independent source of information by RMT's scientific department. The information is based on the latest chemical and toxicological research, and in compliance with relevant standards, guidance notes and legislation (where applicable). The Chem Alert report is not intended as a replacement to the manufacturer's original MSDS that is provided to Chem Alert subscribers for convenience. In many instances, Chem Alert reports are compiled on behalf of manufacturers, in which case they serve as the "Manufacturer's MSDS" and are clearly identified as such on the relevant reports.

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