

AMBER



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MATERIAL SAFETY DATA SHEET

Product Name **DAVID GRAYS JO - JO ONEHUNGA WEEDKILLER**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name DAVID GRAY & CO PTY LIMITED
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Synonym(s) (04149) 200ML - MANUFACTURER'S CODE • (25551) 500ML - MANUFACTURER'S CODE • JO - JO ONEHUNGA WEEDKILLER

Use(s) WEED CONTROL

MSDS Date 21 Jun 2010

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO ASCC CRITERIA

RISK PHRASES

R22 Harmful if swallowed.
R36 Irritating to eyes.
R41 Risk of serious damage to eyes.
R43 May cause sensitisation by skin contact.
R63 Possible risk of harm to the unborn child.
R65 Harmful: May cause lung damage if swallowed.

SAFETY PHRASES

S1/2 Keep locked up and out of reach of children.
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S36/37 Wear suitable protective clothing and gloves.
S46 If swallowed, contact a doctor or Poisons Information Centre immediately and show container or label.

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

UN No. None Allocated **DG Class** None Allocated **Subsidiary Risk(s)** None Allocated
Packing Group None Allocated **Hazchem Code** None Allocated

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC	Not Available	64742-94-5	>60%

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3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
BROMOXYNIL	C7-H3-Br2-N-O	1689-84-5	6.7%
MCPA	C9-H9-Cl-O3	94-74-6	6.7%

4. FIRST AID MEASURES

Eye	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
Inhalation	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
Ingestion	For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).
Advice to Doctor	If vomiting occurs, the solvent present may cause pulmonary pneumonitis.

5. FIRE FIGHTING MEASURES

Flammability	Combustible. May evolve toxic gases (chlorides, phosgene, carbon oxides, hydrocarbons) when heated to decomposition.
Fire and Explosion	Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.
Extinguishing	Dry agent, carbon dioxide or foam. Prevent contamination of drains or waterways.
Hazchem Code	None Allocated

6. ACCIDENTAL RELEASE MEASURES

Spillage	Contact emergency services where appropriate. Use personal protective equipment. Clear area of all unprotected personnel. Ventilate area where possible. Contain spillage, then cover / absorb spill with non-combustible absorbant material (vermiculite, sand, or similar), collect and place in suitable containers for disposal. Eliminate all ignition sources.
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7. STORAGE AND HANDLING

Storage	Store in a cool, dry, well ventilated area, removed from fertilizers, moisture, seeds, acids, oxidising agents, alkalis, 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.
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.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure Stds	No exposure standard(s) allocated.
Biological Limits	No biological limit allocated.
Engineering Controls	Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.
PPE	Wear splash-proof goggles, viton (R) or PVA gloves and coveralls. Where an inhalation risk exists, wear: a Type A (Organic vapour) respirator. At high vapour levels, wear: an Air-line respirator or self Contained Breathing Apparatus (SCBA). If spraying, wear: a Type A-Class P1 (Organic gases/vapours and Particulate) respirator.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	ORANGE/BROWN LIQUID	Solubility (Water)	EMULSIFIES
Odour	SOLVENT ODOUR	Specific Gravity	0.94
pH	NOT AVAILABLE	% Volatiles	NOT AVAILABLE
Vapour Pressure	NOT AVAILABLE	Flammability	NON FLAMMABLE
Vapour Density	NOT AVAILABLE	Flash Point	NOT RELEVANT
Boiling Point	178°C (Approximately)	Upper Explosion Limit	7.0 %
Melting Point	NOT AVAILABLE	Lower Explosion Limit	0.6 %
Evaporation Rate	NOT AVAILABLE		
Appearance	ORANGE/BROWN LIQUID	Odour	SOLVENT ODOUR

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended conditions of storage.
Conditions to Avoid	Avoid heat, sparks, open flames and other ignition sources.
Material to Avoid	Incompatible with oxidising agents (eg. hypochlorites), acids (eg. nitric acid), alkalis (eg. hydroxides), heat and ignition sources.
Hazardous Decomposition Products	May evolve toxic gases (chlorides, phosgene, carbon oxides, hydrocarbons) when heated to decomposition.
Hazardous Reactions	Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary	Moderate toxicity - irritant. This product has the potential to cause adverse health effects with over exposure. Use safe work practices to avoid eye or skin contact and inhalation. Chronic exposure to some solvents may result in central nervous system (CNS), liver and kidney damage. Chlorophenoxy compounds are classified as possibly carcinogenic to humans (IARC Group 2B). This product may be diluted with water before application, which may reduce toxicity. Do not spray near non target trees/shrubs. Do not allow contamination of drains and waterways.
Eye	Irritant. Contact may result in irritation, lacrimation, pain and redness.
Inhalation	Irritant. Over exposure may result in irritation of the nose and throat, coughing and headache. High level exposure may result in nausea, dizziness and drowsiness.
Skin	Irritant. Contact may result in irritation, redness, pain and rash. May be absorbed through skin with harmful effects.
Ingestion	Moderate toxicity. Ingestion may result in nausea, vomiting, abdominal pain, diarrhoea, dizziness and drowsiness. Aspiration may result in chemical pneumonitis and pulmonary oedema.
Toxicity Data	<p>SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC (64742-94-5)</p> <p>LC50 (Inhalation): > 590 mg/m³/4 hours (rat)</p> <p>LD50 (Skin): > 2 mL/kg (rabbit)</p> <p>LDLo (Ingestion): 5 mL/kg (rat)</p> <p>BROMOXYNIL (1689-84-5)</p> <p>LD50 (Ingestion): 63 mg/kg (guinea pig)</p> <p>LD50 (Intravenous): 56 mg/kg (intravenous)</p> <p>LD50 (Skin): > 2000 mg/kg (rat)</p> <p>MCPA (94-74-6)</p> <p>Carcinogenicity: Possibly carcinogenic to humans (IARC Group 2B)</p> <p>LC50 (Inhalation): 1370 mg/m³/4hrs (rat)</p> <p>LD50 (Ingestion): 439 mg/kg (mouse)</p> <p>LD50 (Intravenous): 28 mg/kg (mouse)</p> <p>LD50 (Skin): > 2000 mg/kg (rabbit)</p>

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LDLo (Ingestion): 814 mg/kg (man)
LDLo (Subcutaneous): 28 mg/kg (mouse)

12. ECOLOGICAL INFORMATION

Environment This herbicide is toxic to plants even at low levels. Avoid contamination of non-target plants or crops. Do not allow product to enter drains or waterways.

13. DISPOSAL CONSIDERATIONS

Waste Disposal For small amounts absorb with sand, vermiculite or similar and dispose of to an approved landfill site only. Contact the manufacturer for additional information if larger amounts are involved. Triple rinse (or preferably pressure rinse) containers before disposal. Add rinsings to spray tank.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

Shipping Name	None Allocated			
UN No.	None Allocated	DG Class	None Allocated	Subsidiary Risk(s) None Allocated
Packing Group	None Allocated	Hazchem Code	None Allocated	

15. REGULATORY INFORMATION

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

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

16. OTHER INFORMATION

Additional Information **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.

HERBICIDES: Herbicides are classed as selective when they are used to kill weeds without harming the crop and as non-selective when the purpose is to kill all vegetation. Herbicides can affect plants either by contact or translocation. Contact herbicides kill the plant parts to which the chemical is applied, while translocated herbicides are absorbed either by roots or above-ground parts of plants and then move within the plant system to distant tissues.

ABBREVIATIONS:

ADB - Air-Dry Basis.

BEI - Biological Exposure Indice(s)

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

CNS - Central Nervous System.

EC No - European Community Number.

IARC - International Agency for Research on Cancer.

M - moles per litre, a unit of concentration.

mg/m³ - Milligrams per cubic metre.

NOS - Not Otherwise Specified.

NTP - National Toxicology Program.

OSHA - Occupational Safety and Health Administration.

pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).

ppm - Parts Per Million.

RTECS - Registry of Toxic Effects of Chemical Substances.

TWA/ES - Time Weighted Average or Exposure Standard.

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

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scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

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.

COLOUR RATING SYSTEM: RMT has assigned all Chem Alert reports a colour rating of Green, Amber or Red for the sole 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.

While all due care has been taken by RMT in the preparation of the Colour Rating System, it is intended as a guide only and RMT does not provide any warranty in relation to the accuracy of the Colour Rating System. As far as is lawfully possible, RMT accepts no liability or responsibility whatsoever for the actions or omissions of any person in reliance on the Colour Rating System.

Report Status This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Material Safety Data Sheet ('MSDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this MSDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this MSDS.

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End of Report