

Section 1 - Identification of Chemical Product and Company

Amgrow Pty Ltd (Commercial Products Division) Phone: (02) 9395 1200(Business hours)
PO Box 6390 Fax: (02) 9395 1241
Silverwater NSW 1811

Trade Name: Jolt Herbicide
Product Use: Selective Herbicide
Creation Date: May 2012

Section 2 - Hazards Identification

Statement of Hazardous Nature

CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF ASCC
NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE
SUSMP Classification: S5

Risk Phrases: R22 Harmful if swallowed; R38 Irritating to skin; R41 Risk of serious damage to eyes

Safety Phrases: S2 keep out of reach of children; S13 Keep away from food, drink and animal feeding stuffs; S23 Do not breathe vapour or spray; S25 Avoid contact with eyes; S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice, S46 If swallowed seek medical advice.

Hazchem Code: None allocated

Emergency Overview

Physical Description & colour: Viscous light brown suspension

Odour: Slight sweet odour

Major Health Hazards: Risk of serious eye damage

Potential Health Effects

Eye Contact: Irritating to eyes. It will cause discomfort such as stinging pain, watering and redness of the eyes. Effects may last after exposure has ceased, and in severe exposure, long lasting or even permanent effects such as corneal damage can occur.

Inhalation: Irritating if inhaled. Will cause discomfort to throat and lungs and/or coughing, which should disappear once exposure has ceased

Skin Contact: May irritate the skin. It is unlikely to cause any more than mild transient discomfort. It is also unlikely to cause any significant lasting effects.

Ingestion: Mildly irritating to the gastrointestinal tract. Will cause mild to strong sensation to mouth and throat.

Carcinogen Status:

ASCC: No significant ingredient is classified as carcinogenic by ASCC at stated concentration.

NTP: No significant ingredient is classified as carcinogenic by NTP at stated concentration

IARC: No significant ingredient is classified as carcinogenic by IARC at stated concentration

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc.%
MCPA	94-74-6	30
Clopyralid	1702-17-6	2
Diflufenican	83164-33-4	1.5
Propylene glycol	57-55-6	30-50
Non hazardous		30-50

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

MATERIAL SAFETY DATA SHEET

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.

Ingestion: Wash out mouth with water. Do not induce vomiting. Keep patient at rest and seek medical advice.

Inhalation: Remove victim to fresh air. Seek medical advice if symptoms are experienced.

Skin Contact: Wash off skin immediately with soap and plenty of water. Remove all contaminated clothing and shoes. Seek medical advice if irritation persists. Launder contaminated clothing before re-use.

Eye Contact: Rinse immediately with plenty of water for at least 15 minutes, holding eye open and taking care to rinse under eyelids as well. If irritation persists seek medical attention.

Note to Doctor or First Aider: Treat Symptomatically. Note the nature of this product.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: There is no risk of an explosion from this product under normal circumstance if it is involved in a fire

Extinguishing Media: Use extinguishing media suited to materials burning – Large fires, foam or water spray, small fires, Carbon dioxide, dry chemical

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. Immediately evacuate area. Fire fighters to wear non-flammable protective clothing, gloves, hat, goggles and respirator. All skin areas to be covered.

Flash point: Not determined

Upper & Lower Flammability Limits: No data

Auto ignition temperature: No data

Fire Decomposition Products: Fire decomposition products may form toxic and irritating mixtures in confined spaces. Likely to decompose only after heating to dryness followed by further strong heating.

Section 6 - Accidental Release Measures

Accidental release: 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. Wear protective chemically resistant clothing including face mask, face shield, and gauntlets. 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. Avoid using sawdust or other combustible material. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly.

After spills, decontaminate spill area with hydrated lime scattered over the spill prior to rinsing off with water. Prevent runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Do not dispose of undiluted chemical on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If there is any conflict between this MSDS and label, instructions on the label prevail. Dispose of only in accord with all regulations. Launder all contaminated clothing before re-use and advise laundry of nature of contaminant.

Section 7 - Handling and Storage

Handling: This product is an S5 Poison (CAUTION). Observe all relevant regulations regarding sale, transport and storage of this class of product. 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.

Storage: Store in a cool, dry place away from children and animals or foodstuffs. 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" in Section 10.

Section 8 - Exposure Controls and Personal Protection

Exposure Limits	TWA (mg/m ³)	STEL (mg/m ³)	ADI (mg/Kg/day)	NOEL (mg/Kg/day)
MCPA	not set	not set	0.01	1.1
Clopyralid	not set	not set	0.5	50
Diflufenican	not set	not set	0.2	16.3

A **TWA** has not been established by Worksafe Australia for any of the major ingredients in this product. There is a blanket limit of 10mg/m³ for dusts or mists when limits have not otherwise been established. 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

ADI means Acceptable Daily Intake and **NOEL** means No-observable-effect-level. (ADI List 31ST Dec 2006)

This product is intended for outdoor use where engineering controls are not necessary. 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**.

Ventilation: Avoid vapours and provide local exhaust ventilation where necessary.

Eye Protection: To avoid contact with eyes, wear face shield, goggles or safety glasses. Emergency eyewash should be readily accessible.

Skin Protection: Wear impermeable PVC gloves to prevent skin contact. Wear overall and long sleeves to prevent skin contact

Respirator: Use respirator protection with cartridge on account of this product. Use P2 type canister respirator if required

Safety Boots: Safety boots in industrial situations are advised

Provision of eye wash facilities and safety shower recommended.

Wash hands before eating, drinking, smoking or going to toilet, launder protective clothing before re-use or destroy contaminated clothing. Advise laundry of nature of contamination.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Viscous light brown suspension
Odour:	Slight sweet odour
Boiling Point:	Approx 100°C at 100kPa
Volatiles:	Solvent component
Vapour Pressure:	No data
Vapour Density:	No data.
Specific Gravity:	1.16 @ 20°C
Water Solubility:	Dispersible
pH:	10 (undiluted)
Odour Threshold:	No data.
Evaporation Rate:	No data.
Flash Point	Not determined

Section 10 - Stability and Reactivity

Reactivity: This product is stable under normal temperatures and pressures, when stored and handled in accordance with this MSDS

Conditions to Avoid: Store away from heat or fire, keep away from direct sunlight

Incompatibilities: Strong oxidising agents

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Fire Decomposition: Fire decomposition products may form toxic and irritating mixtures in confined spaces. Likely to decompose only after heating to dryness followed by further strong heating.

Polymerisation: Will not spontaneously polymerise

Section 11 - Toxicological Information

Human Toxicology

Irritating to eyes. Severe exposure may result in long lasting or even permanent effects such as corneal damage. Irritating if inhaled. May irritate the skin. Mildly irritating to the gastrointestinal tract.

Animal Toxicology:

For Clopyralid: LD₅₀ Oral (Rat) = 2675 mg/kg, LD₅₀ Dermal (Rat > 2000 mg/kg, LC₅₀ Inhalation (Rat) > 0.38 mg/L4hr

For Diflufenican: LD₅₀ Oral (Rat) > 2000 mg/kg, LD₅₀ Dermal (Rat > 2000 mg/kg, LC₅₀ Inhalation (Rat) > 2.34 mg/L4hr

For MCPA: LC₅₀ Oral (Rat) 900 – 1160 mg/kg, LD₅₀ Oral (mouse) 550 mg/kg, LD₅₀ Dermal (Rat > 4000 mg/kg, LC₅₀ Inhalation (Rat) > 6.36 mg/L4hr

Section 12 - Ecological Information

Persistence / Degradability

Soil half-life for Diflufenican is 15 to 30 weeks, MCPA residual activity in soil is 3 to 4 months.

Other Precautions: Do not contaminate dams, waterways or sewers with this product or the containers, which have held this product. Spray drift should be avoided

Ecotoxicology

Aquatic organisms:

MCPA: Rainbow trout LC₅₀ (96 hr) = 232 mg/L, Daphnia LC50 (48hr) = >100 mg/L

Clopyralid: Rainbow trout LC₅₀ (96 hr) = 103.5 mg/L, Daphnia LC50 (48hr) = 225 mg/L

Diflufenican: Rainbow trout LC₅₀ (96 hr) = 56-100 mg/L, Daphnia LC50 (48hr) = >10 mg/L

Other Organisms:

MCPA: Bobwhite quail oral LD₅₀ = 377 mg/kg, Bee LD₅₀ = >104 mg/bee

Clopyralid: Bobwhite quail oral LD₅₀ > 2000 mg/kg, Bee non toxic

Diflufenican: Bobwhite quail oral LD₅₀ > 2150 mg/kg, Bee non toxic

Section 13 - Disposal Considerations

Disposal: Full details regarding disposal of used containers, and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Dispose of only in accord with all regulations.

On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities that hold periodic collections of unwanted chemicals (ChemClear®).

Container Disposal Do not use this container for any other purpose. Triple rinse containers, add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. drumMUSTER is the national program for the collection and recycling of empty, cleaned, non-returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMuster symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, puncture or shred and bury containers in local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

Section 14 - Transport Information

ADG Code: This product is not classified as a Dangerous Good for transport by road or rail.
IMDG/IATA: Not classified as a Dangerous Good for transport by sea or air

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are to be found in the public AICS Database.
SUDSP: Scheduled as S5 - Caution

Section 16 - Other Information

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

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail
AICS	Australian Inventory of Chemical Substances
ASCC	Office of the Australian Safety and Compensation Council
CAS number	Chemical Abstracts Service Registry Number
Hazchem Number	Emergency action code of numbers and letters that provide information to emergency services especially fire fighters
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Marine Transport Dangerous Goods
NOHSC	National Occupational Health & Safety Commission
NTP	National Toxicology Program (USA)
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
UN Number	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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