

Material Safety Data Sheet

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Infosafe No. 3NU49 Issue Date : December 2005 ISSUED by CRPCARE

Product Name : **STOMP® 330EC Herbicide**

Classified as hazardous according to criteria of NOHSC

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Product Name STOMP® 330EC Herbicide
Product Code 0761
Product Use For the control of annual ryegrass and wireweed in wheat, barley and peas and annual grasses and certain broadleaved weeds in various crops as shown in the Directions For Use Table.
Company Name Crop Care Australasia Pty Ltd (ABN 53 061 362 347)
Address Unit 15/16 Metroplex Avenue Murarrie
Queensland 4172 Australia
Emergency Tel. 1800 033 498
Telephone Number/Fax Tel: (07) 3909 2000 Fax: (07) 3909 2010
Product Type Group D Herbicide
Other Information This MSDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Liquid

Ingredients	Name	CAS	Proportion
	Pendimethalin technical	40487-42-1	330 g/L
	Surfactants		5-10 %
	Hydrocarbon Liquid	64742-94-5	578 g/L or 594 g/L

3. HAZARDS IDENTIFICATION

Harmful if swallowed.
Harmful: may cause lung damage if swallowed.
Other Information Poisons Schedule 5

4. FIRST AID MEASURES

Inhalation Remove to fresh air, apply artificial respiration if necessary.
Ingestion Give water or milk to drink. DO NOT induce vomiting.
Skin Wash affected areas thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
Eye If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.
First Aid Facilities If poisoning occurs, contact a doctor or Poisons Information Centre on 13 11 26 (Australia).
Advice to Doctor Treat symptomatically.
If vomiting occurs, solvent present may cause pulmonary pneumonitis.

5. FIRE FIGHTING MEASURES

Extinguishing Media Water fog, foam, carbon dioxide or dry chemical.
Hazardous Combustion Products If involved in a fire, it will emit oxides of carbon, oxides of nitrogen and possibly cyanides.
Emergency Action in case of Fire If exposed to fire, keep container cool by spraying with water.
If possible, remove other containers from the area of fire.
Protective Equipment Breathable air apparatus may have to be worn in confined spaces.
Other Information Prevent fire water from entering drains or water bodies.

6. ACCIDENTAL RELEASE MEASURES

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Spills & Disposal	Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect spilled material and waste in sealable open-top type containers for disposal.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.

7. HANDLING AND STORAGE

Handling	For personal protective equipment (PPE) and hygiene advice, refer Section 8. Pendimethalin is coloured and will strongly stain skin and clothing. If skin has been exposed to the product, thorough washing with soap and water will remove any excess product. The colour on the skin is not deep and will naturally disappear over a few days.
Storage	Store in the closed, original container in a dry, cool well ventilated area out of direct sunlight.
Other Information	Always read the label and any attached leaflet before use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	No exposure standard has been established for this product. The manufacturer of the solvent has recommended an occupational exposure limit of 100 mg/m ³ ; 17ppm TWA, as total hydrocarbon.
Respiratory Protection	Do not inhale spray mist.
Personal Protective Equipment	When opening the container, preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, nitrile or elbow-length PVC gloves and face shield or goggles.
Eng. Controls	Handle in well ventilated areas, generally natural ventilation is adequate.
Hygiene Measures	Wash concentrate from skin and eyes immediately. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash contaminated clothing and safety equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear liquid with yellow-orange tinge
Odour	Solvent odour
Melting Point	Some crystallisation occurs between 0 and -7°C
Boiling Point	183-210°C (for solvent)
Solubility in Water	Forms an emulsion in water. 0.54mg/l pH4 ; 0.33 mg/l pH7 The product will emulsify in water forming a yellow, milky emulsion.
Specific Gravity (H₂O=1)	0.988
Vapour Pressure	Pendimethalin 4.0mPa @ 25°C; Solvent 0.1kPa @20°C
Volatile Component	50-60%
Partition co-efficient, n-octanol/water	Kow Log P is 5.2 (pH7.0)
Surface Tension	32.5 CP
Flash Point	65°C
Flammability	Combustible liquid C1.
Ignition Temperature	>450°C (solvent)
Flammable Limits LEL	0.6 vol% for solvent
Flammable Limits UEL	7.0 vol% for solvent
Kinematic Viscosity	3 x 10 ⁻⁶ m ² /s

10. STABILITY AND REACTIVITY

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Hazardous Polymerization	Hazardous polymerisation is not possible.
Hazardous Reaction	Keep away from strong oxidising agents, may react violently.
Conditions to Avoid	Prolonged reaction with water can cause slow decomposition and the formation of acid which may attack drums. If a part open drum is to be stored, ensure that no water has been added to the drum. Technical pendimethalin (before formulation) has exhibited exothermic decomposition at around 200°C. Avoid heating the product to high temperatures.

11. TOXICOLOGICAL INFORMATION

Inhalation	High vapour concentrations of the solvent while handling the concentrate are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, can be anaesthetic and may have other central nervous system effects. When applying the product as a spray avoid breathing in spray mists.
Ingestion	The concentrate is of low toxicity if swallowed. If aspirated into the lung, e.g. from vomiting, the presence of solvent may result in chemical pneumonitis or other lung damage.
Skin	The concentrate is not considered a serious toxic hazard. Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.
Eye	The concentrate may cause irritation after short contact with the eyes, but permanent damage is not anticipated.
Chronic Effects	Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.
Reproductive Toxicity	Data indicates no reproductive effects.
Mutagenicity	Data indicates no teratogenic effects.
Carcinogenicity	Data indicates no mutagenic effects.
Acute Toxicity - Oral	A marked depression in body weight and a statistically significant increase in benign thyroid tumors (follicular adenomas) were observed at the highest dose level (5000ppm) in a lifetime (24 month) rat study, not considered to be relevant to humans. (1) LD50 (rat) >5000 mg/kg for pendimethalin
Acute Toxicity - Dermal	LD50 (rat) >2000 mg/kg for pendimethalin
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >320 mg/l
Eye Irritation	Not an eye irritant.
Skin Irritation	Not a skin irritant.
Skin Sensitisation	Prolonged and repeated skin contact may result in skin sensitisation.
Other Information	The Australian Acceptable Daily Intake (ADI) for pendimethalin for a human is 0.1 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 12 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, 'ADI List', TGA, September 2005).

12. ECOLOGICAL INFORMATION

Known Harmful Effects on the Environment	The product is a marine pollutant for sea transport.
Other Precautions	Do not contaminate dams, waterways or sewers with this product. Do not spray in high winds.
Environ. Protection	Spray drift can cause damage.
Acute Toxicity - Fish	Toxic to fish. LC50 (96hr) for rainbow trout is 0.14 mg/l. LC50 (96 hr) for bluegill sunfish is 0.2 mg/l. LC50 (96 hr) for channel catfish is 0.42 mg/l.

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Acute Toxicity - Other Organisms	Dietary LC50 (8d) for bobwhite quail is 4187 mg/kg LD50 for mallard duck is 10388 mg/kg Bees: Not toxic to bees. LD50 >50 µg/bee.
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13. DISPOSAL CONSIDERATIONS

Product Disposal	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 who hold periodic collections of unwanted chemicals (ChemCollect).
Container Disposal	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. Returnable containers: empty contents fully into application equipment. Replace cap, close all valves and return to the point of supply for refill or storage. 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.

14. TRANSPORT INFORMATION

U.N. Number	None Allocated
Proper Shipping Name	None Allocated
DG Class	None Allocated
Hazchem Code	None Allocated
Packing Group	None Allocated
Storage and Transport	Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.
UN Number (Sea Transport)	3082
IMO Class/Packing Group	Class 9; Packing Group III
IMO Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Pendimethalin)

15. REGULATORY INFORMATION

Risk Phrase	R22 Harmful if swallowed. R65 Harmful: may cause lung damage if swallowed.
Safety Phrase	S13 Keep away from food, drink and animal feeding stuffs. S2 Keep out of reach of children. S25 Avoid contact with eyes. S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.
Poisons Schedule	S5
Packaging & Labelling	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Hazard Category	Harmful
AICS (Australia)	All of the components in this product are listed on the Australian Inventory of Chemical Substances.

16. OTHER INFORMATION

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Contact Person/Point Normal Hours: Mr Volker Maier Phone: (03) 9282 1000
After Hours: Shift Supervisor Phone: 1800 033 498

References (1) European Union review report for the active substance Pendimethalin 7477/V1/98 final, dated 13th January 2003.

Revisions The MSDS was reviewed. Minor changes were made to the information.

Highlighted

...End Of MSDS...