

Material Safety Data Sheet

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Infosafe No™ 3NUIE	Issue Date :April 2008	ISSUED by CRPCARE	CS: 1.4.21
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Product Name **AFFINITY FORCE® HERBICIDE**

Classified as hazardous according to criteria of NOHSC

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	AFFINITY FORCE® HERBICIDE
Product Code	0116
Product Type	Group G Herbicide
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 (24hr Australia)
Telephone/Fax Number	Tel: +61 7 3909 2000 Fax: +61 7 3909 2010
Recommended Use	For the control of certain annual broadleaf weeds in winter cereals and pyrethrum as per the Directions For Use table on the label.
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. HAZARDS IDENTIFICATION

Hazard Classification	Classified as hazardous according to criteria of NOHSC HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. Hazard classification according to the criteria of NOHSC. Dangerous goods classification according to the Australia Dangerous Goods Code.
Risk Phrase(s)	Classified as hazardous according to criteria of NOHSC R65 Harmful: may cause lung damage if swallowed. R66 Repeated exposure may cause skin dryness and cracking. R67 Vapours may cause drowsiness and dizziness
Safety Phrase(s)	S13 Keep away from food, drink and animal feeding stuffs. S2 Keep out of reach of children. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
Other Information	Poisons Schedule : Not Scheduled

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization	Liquid												
Ingredients	<table><thead><tr><th><u>Name</u></th><th><u>CAS</u></th><th><u>Proportion</u></th></tr></thead><tbody><tr><td>Carfentrazone-ethyl</td><td>128639-02-1</td><td>240 g/L</td></tr><tr><td>Other ingredients (considered non-hazardous)</td><td></td><td>30-60 %</td></tr><tr><td>Liquid Hydrocarbon</td><td>64742-94-5</td><td>10-30 %</td></tr></tbody></table>	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>	Carfentrazone-ethyl	128639-02-1	240 g/L	Other ingredients (considered non-hazardous)		30-60 %	Liquid Hydrocarbon	64742-94-5	10-30 %
<u>Name</u>	<u>CAS</u>	<u>Proportion</u>											
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Other ingredients (considered non-hazardous)		30-60 %											
Liquid Hydrocarbon	64742-94-5	10-30 %											

4. FIRST AID MEASURES

Inhalation	Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.
Ingestion	Rinse mouth and then drink plenty of water. If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Aust). Make every effort to prevent vomit from entering the lungs by careful placement of the patient.
Skin	Remove contaminated clothing and launder before re-use. Wash affected areas thoroughly with soap and water.
Eye	If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.

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First Aid Facilities Seek medical advice.
If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.

Advice to Doctor Treat symptomatically.
If vomiting occurs, solvent present may cause pulmonary pneumonitis.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media Water fog, foam, carbon dioxide or dry chemical.

Hazards from Combustion Products If involved in a fire, it may emit hydrogen chloride, phosgene and hydrogen fluoride.

Special Protective Equipment for fire fighters Breathable air apparatus should be worn when fighting a fire in which this product is involved.

6. ACCIDENTAL RELEASE MEASURES

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.
On-site disposal of concentrate is not acceptable.

Personal Protection For appropriate personal protective equipment (PPE), refer Section 8.

Environmental Precautions This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

7. HANDLING AND STORAGE

Precautions for Safe Handling Do NOT spray in high winds.
Do NOT contaminate dams, rivers or streams, or any other water bodies with pesticide or used containers.

Conditions for Safe Storage Store in the closed, original container in a dry, well ventilated area, as cool as possible.
Do not store for prolonged periods in direct sunlight.
Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.

Tank Cleaning See label for detailed information on cleaning of spray equipment.

Other Information Always read the label and any attached leaflet before use.
Mix only as much herbicide solution as needed at the time. Do not store the sprayer for any extended period of time, especially overnight, with Affinity Force Herbicide spray solution remaining in the tank, spray lines, spray boom plumbing or spray nozzles or strainers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards The manufacturer of the solvent has recommended an occupational exposure limit of 100 mg/m³; 15ppm TWA, as total hydrocarbon.

Engineering Controls Handle in well ventilated areas, generally natural ventilation is adequate.

Personal Protective Equipment When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length rubber gloves and face shield or goggles.
Re-entry period: Do not enter treated area until spray has dried.

Hygiene Measures 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.

Requirements Concerning Special Training NSW regulations require that people who use pesticides in their job or business must have training in the application of the materials.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Liquid

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Appearance	Milky emulsion.
Boiling Point	220-290°C (for solvent)
Solubility in Water	Forms an emulsion in water.
Specific Gravity	1.07
Vapour Pressure	0.016 mPa @ 25°C for carfentrazone ethyl
Vapour Density (Air=1)	>1 (solvent)
Octanol/Water Partition Coefficient	Kow Log P is 3.36 for carfentrazone-ethyl
Flash Point	>104°C
Flammability	Combustible liquid C1.
Auto-Ignition Temperature	>450°C (solvent)

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions. Hydrolyses at pH >7.
Hazardous Reactions	Keep away from strong oxidising agents.
Hazardous Polymerization	Hazardous polymerisation is not possible.

11. TOXICOLOGICAL INFORMATION

Toxicology Information	No harmful effects are expected if the precautions on the label and this MSDS are followed.
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, and may have other central nervous system effects.
Ingestion	If aspirated into the lung, e.g. from vomiting, the presence of solvent may result in chemical pneumonitis or other lung damage.
Skin	Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.
Eye	The concentrate will cause irritation of the eyes. Possible symptoms include redness, swelling, tearing and pain.
Chronic Effects	Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.
Acute Toxicity - Oral	LD50 (female, rat) >4,000 mg/kg for the product
Acute Toxicity - Dermal	LD50 (rabbit) >4,000 mg/kg for the product
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >6 mg/l
Other Information	The Australian Acceptable Daily Intake (ADI) for carfentrazone-ethyl for a human is 0.03 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 3 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 Office of Chemical Safety, 'ADI List', September 2007).

12. ECOLOGICAL INFORMATION

Other Precautions	Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
Environ. Protection	Spray drift can cause damage, read the label for more information.
Acute Toxicity - Fish	The following is data for the active ingredient, carfentrazone-ethyl. Not toxic to fish. LC50 (96 hr) for various species is 1.6 - 43 mg/l.
Acute Toxicity - Daphnia	LC50 (96hr) for daphnia is 9.8 mg/l.

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Acute Toxicity - Other Organisms Birds: Not toxic to birds. LD50 for quail is >1000 mg/kg
Bees: Not toxic to bees. LD50 >100 (contact) µg/bee.

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 (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.

14. TRANSPORT INFORMATION

Transport Information Not classified as Dangerous Goods, according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

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 Marine Pollutant Marine Pollutant

IMO Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Carfentrazone Ethyl)

15. REGULATORY INFORMATION

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

Date of preparation or last revision of MSDS 02/04/2008

Contact Person/Point Revisions Highlighted Other Information Normal Hours: Mr Volker Maier Phone: (03) 9282 1000
After Hours: Shift Supervisor Phone: 1800 033 498
First Issue

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...End Of MSDS...

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