

Infosafe No™ 3NUVT	Issue Date : June 2017	ISSUED by NUFARMNZ
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Product Name **JOKER® 840**

1. Identification

GHS Product Identifier	JOKER® 840
Product Code	00352
Product Type	Herbicide
Company Name	Nufarm NZ
Address	6 Manu Street, Otahuhu Auckland 2024 New Zealand
Telephone/Fax Number	Tel: 0-9-270 4150 Fax: 0-9-270 4159
Emergency phone number	0800 651 911
Email	info@nz.nufarm.com
Recommended use of the chemical and restrictions on use	For selective pre-emergence weed control of annual grasses and many broadleaf weeds in maize and sweetcorn.
Other Information	This SDS 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. Hazard Identification

Other Information	6.1D acute toxicant, 6.3A skin irritant, 6.4A eye irritant, 6.5B sensitiser, 6.9B target organ toxicant, 9.1A aquatic toxicant, 9.2A soil toxicant, 9.3C terrestrial vertebrate toxicant, TOXICITY Harmful - may be harmful if swallowed, inhaled or absorbed through the skin. May cause kidney or liver damage from repeated oral exposure at high doses. May cause eye irritation or mild skin irritation or sensitisation from prolonged skin contact. ECOTOXIC Very toxic to aquatic organisms. Selective herbicide - very toxic to some plant species. Harmful to terrestrial vertebrates.
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3. Composition/information on ingredients

Chemical Characterization	Liquid		
Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Acetochlor	34256-82-1	840g/L
	2, 2-dichloro-N, N-di-2-propenylacetamid e	37764-25-3	<110 g/L

4. First-aid measures

First Aid Measures	For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if the victim is not breathing. Use mouth-to-nose rather than mouth-to-mouth. Obtain medical attention.
Inhalation	Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.
Ingestion	Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. For advice, contact the National Poisons Centre (0800 764 766). Seek medical assistance immediately.
Skin	Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. If a large area is affected seek medical assistance.
Eye contact	Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance. Remove contact lenses, if present and

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First Aid Facilities easy to do.
Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

Advice to Doctor Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media Water fog, foam, carbon dioxide or dry chemical.

Hazards from Combustion Products None known.

Special Protective Equipment for fire fighters Full protective clothing and self-contained breathing apparatus.

Specific Methods Keep up wind. Do not allow washings to reach sewage or effluent systems.

Specific hazards arising from the chemical No unusual fire and explosion hazards known.

Hazchem Code 2X

Other Information Location Certificate: Not applicable
Hazardous Atmosphere Zone: Not applicable
Number of Fire Extinguishers: Not applicable

6. Accidental release measures

Spills & Disposal Wear protective clothing. Clear area of unprotected personnel. Contain spill and absorb with sand, soil or absorbent granules. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill. Thoroughly scrub floor with a strong industrial type detergent solution and rinse with water.

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

Environmental Precautions Prevent from entering drains, waterways or sewers.

7. Handling and storage

Precautions for Safe Handling Avoid skin and eye contact and inhalation of spray mist.
APPROVED HANDLER: This product must be under the control of an approved handler when applied in a wide dispersive manner; or used by a commercial contractor.
TRACKING: Is not required
RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if 3L or more is applied within 24 hours.
Do not allow product to drift outside the target area.

Conditions for safe storage, including any incompatibilities Keep out of reach of children.
Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertilisers and seeds. Storage must be in accordance with NZS 8409 Management of Agrichemicals.
Stores containing 100L of JOKER 840 require secondary containment and are subject to signage, and more than 100L require emergency response plans.

Other Information Aggregate Storage Volume Thresholds:
When stored with substances of the same hazard classification the aggregate quantity must be considered. For full details refer to the current NZS8409 Management of Agrichemicals and the HSNO Regulations.

8. Exposure controls/personal protection

Occupational exposure limit values No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product.

Appropriate engineering controls Use in a well ventilated area only. Local exhaust ventilation may be required in confined spaces.

Personal Protective Equipment Avoid skin and eye contact and inhalation of spray mist.
When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist, safety goggles,

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Hygiene Measures waterproof gloves, and boots.
 Do not eat, drink or smoke while using.
 Remove protective clothing and wash hands and face thoroughly before meals
 and after work. Wash protective clothing daily after work.

9. Physical and chemical properties

Form Liquid

Appearance Brown liquid.

Odour Mild sweet odour

Melting Point Not applicable

Boiling Point Not determined (Acetochlor = 172°C/5mm Hg)

Solubility in Water Emulsifies

Specific Gravity 1.12

pH 5.0-9.0

Vapour Pressure Not determined (Acetochlor = 6.0mPa, 25°C)

Flammability Combustible.

Oxidising Properties Not applicable

Other Information (EC) Emulsifiable concentrate

10. Stability and reactivity

Chemical Stability Stable under normal conditions of handling and storage.

Hazardous Decomposition Products Thermal decomposition products include: carbon monoxide.

Hazardous Polymerization Hazardous polymerisation will not occur.

11. Toxicological Information

Acute Toxicity - Oral LD50 (rat) = 2,148mg/kg (acetochlor)

Acute Toxicity - Dermal LD50 (rabbit) = 4,166mg/kg (acetochlor)

Acute Toxicity - Inhalation LC50 (rat) (4h) >3.0mg/L air (acetochlor)

Ingestion Slightly toxic.

Inhalation Inhalation may be harmful.

Skin Harmful if absorbed through the skin. Prolonged or frequently repeated skin contact may cause an allergic reaction in some individuals.

Eye May irritate the eyes.

Skin Sensitisation Expected to be a skin sensitizer

Reproductive Toxicity Acetochlor did not cause birth defects in test animals.

Chronic Effects Acetochlor is a suspected kidney toxicant. NOEL = 2mg/kg bw/day

Serious eye damage/irritation Irritant

Mutagenicity Acetochlor did not cause genetic changes

Other Information Acetochlor technical: In feeding studies with rats and mice (91-day), acetochlor produced reduced body weights. In repeat dosing studies with dogs, acetochlor produced reduced body weights and feed consumption; with liver, kidney and bone marrow effects at amounts which produced some animal deaths (119-day); or with testicular effects (1-year). Following repeated skin exposure (3-weeks) to acetochlor, skin irritation and animal deaths (only at the highest exposure level) were the primary effects in rabbits. Skin allergy was observed in guinea pigs following repeated skin exposure. Decreased body

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weight, reduced feed efficiency, some animal deaths, some organ weight changes, slight anaemia, eye damage, liver and kidney effects and tumours of the liver, lung and possibly histolytic sarcomas were noticed with long-term (23 month) feeding of acetochlor to mice. Decreased body weight, reduced food consumption, some animal deaths, slight anaemia, effects on liver, lung, heart, arteries, tongue and nerve tissues, and tumours of the liver, nasal turbinates and thyroid were noticed with long term (24-27 month) feeding of acetochlor to rats. Most of the tumours in rats and mice occurred only at levels of exposure which produced excessive toxicity.

12. Ecological information

Ecological Information	Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters. This chemical (acetochlor) demonstrates properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the ground water is shallow may result in ground water contamination. Acetochlor has properties that may result in surface water contamination via dissolved runoff and runoff erosion. Practices should be followed to minimize the potential for dissolved runoff and/or runoff erosion. Microbial degradation accounts for most loss from soil; DT50 8-18d for acetochlor
Persistence and degradability	Adsorbed by soil, with little leaching.
Mobility	Acetochlor is not bioaccumulative
Bioaccumulative Potential	Spray drift can cause damage.
Environmental Protection	
Acute Toxicity - Fish	LC50 (96h) Rainbow trout 0.36mg/L (acetochlor) NOEC Rainbow trout eggs = 0.19mg/L (acetochlor) NOEC Fathead minnow (36d) = 0.45mg/L (acetochlor)
Acute Toxicity - Daphnia	LC50 (48h) Daphnia = 8.6mg/L (acetochlor) NOEL (21d) Daphnia = 0.0221mg/L (acetochlor)
Acute Toxicity - Algae	EC50 (96h) Skeletonema costatum = 0.0034mg/L (acetochlor)
Acute Toxicity - Other Organisms	LD50 Bobwhite quail = 1,260mg/kg (acetochlor) LC50 (14d) Earthworms = 211mg/kg (acetochlor) LD50 (24h) Bees = >200mg/bee contact, >100mg/bee oral (acetochlor) LD50 (96h) Bees = 1,715mg/bee (acetochlor) LC50 Bobwhite quail = >5,620mg/kg (5-day dietary) (acetochlor) NOEL Mallard ducks = 30ppm (22-23w) (acetochlor)

13. Disposal considerations

Product Disposal	Dispose of product only by using according to the label, or at an approved landfill.
Container Disposal	PLASTIC: Triple rinse empty container and add rinsate to spray tank. Recycle empty container. Otherwise crush and bury in a suitable landfill.

14. Transport information

U.N. Number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (acetochlor, 84%)
Transport hazard class(es)	9
Hazchem Code	2X
Packaging Method	-
Packing Group	III
EPG Number	-
IERG Number	47
IMO Marine Pollutant	Yes. Environmentally Hazardous Substance mark required.

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IMDG EMS F-A, S-F

Other Information Do not carry this product on a passenger service vehicle.
Segregation: Check the latest Land Transport Rule Dangerous Goods Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.

15. Regulatory information

National and or International Regulatory Information Registered pursuant to the ACVM Act 1997, No. P9004
See www.foodsafety.govt.nz for registration conditions
Approved pursuant to the HSNO Act 1996, Approval Code HSR000404
See www.epa.govt.nz for approval controls.

Packaging & Labelling HARMFUL - keep out of reach of children
ECOTOXIC

Hazard Rating NFPA/HMIS: 2-1-1

Systems

Hazard Category HARMFUL * ECOTOXIC - Keep out of reach of children

16. Other Information

Date of preparation or last revision of SDS December 2015

Contact Person/Point IN AN EMERGENCY, DIAL 111 - FIRE OR POLICE
24Hr Tollfree Emergency No: 0800 651 911
24Hr Emergency No: National Poisons Centre Phone: 0800 764 766

Revisions Highlighted Minor changes and updates made to the SDS.

...End Of MSDS...

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