



Infosafe No™ 3NUAL	Issue Date : December 2013	ISSUED by NUFARMNZ
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Product Name **SEMPRA®**

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

Product Name SEMPRA®
Product Code 00601
Product Use For the control of nutsedge in maize crops and established turf grasses.
Company Name Nufarm NZ
Address 6 Manu Street, Otahuhu
Auckland 2024 New Zealand
Emergency Tel. 0800 651 911
Telephone Number/Fax Tel: 0-9-270 4150
Fax: 0-9-270 4159
Product Type Herbicide
Email info@nz.nufarm.com
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. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Solid

Ingredients	Name	CAS	Proportion
	Halosulfuron - methyl	100784-20-1	750 g/kg
	Ingredients determined to be non-hazardous	-	Balance

3. HAZARDS IDENTIFICATION

Reproductive Toxicity Data indicates no reproductive effects.
Data indicates no teratogenic effects.
Mutagenicity Data indicates no mutagenic effects.
Carcinogenicity Data indicates no carcinogenic effects.
Inhalation Not a likely route of exposure when handling the concentrate.
However, care should be taken to avoid the inhalation of excessive amounts of spray mist during field spraying, respiratory irritation may occur.
Ingestion Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury.
However, swallowing of large amounts may cause injury.
Skin The concentrated product may cause slight irritation on contact.
Eye May cause some discomfort if contact is prolonged.
Other Information 6.1D acute toxicant, 6.4A eye irritant, 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 eye irritation. May cause damage to the blood system from repeated oral exposure at high doses.
ECOTOXIC
Very toxic to aquatic organisms.
Selective herbicide - very toxic to some plant species.
Harmful to terrestrial vertebrates.

4. 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.

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Ingestion	Seek medical assistance immediately. 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. Do not scrub the skin.
Eye	Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance. Remove contact lenses, if present and easy to do.
First Aid Facilities	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

Extinguishing Media	If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material. Water fog, foam, carbon dioxide or dry chemical.
Specific Methods	Keep up wind. Do not allow washings to reach sewage or effluent systems.
Hazardous Combustion Products	Non combustible. Non flammable. If involved in a major fire, could evolve oxides of nitrogen, sulphur or hydrogen chloride.
Protective Equipment	Full protective clothing and self-contained breathing apparatus.
Flammability	Non combustible material.
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. Sweep up solids without generating dust (use water to dampen). Contain and absorb liquid spills with inert material and place in waste containers. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.
Environmental Precautions	Prevent from entering drains, waterways or sewers. This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

7. HANDLING AND STORAGE

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 3kg or more is applied within 24 hours. BEWARE: Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants. This product must not be applied onto or into water.
Storage	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 100kg of SEMPRA are subject to signage, and more than 100kg require emergency response plans.
Unsuitable Materials	Do not use chlorine bleach with ammonia. All traces of liquid fertilizer containing ammonium nitrate or ammonium sulphate must be rinsed with water from the mixing and application equipment before adding chlorine bleach solution. Failure to do so will release a gas with a musty chlorine odour which can cause eye, nose, throat and lung irritation. Do not clean equipment in an enclosed area.

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Product Name **SEMPRA®**

Packaging	HARMFUL * ECOTOXIC - keep out of reach of children
Other Information	Always read the label and any attached leaflet before use. 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

National Exposure Standards	No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product.
Personal Protective Equipment	When opening the container, preparing spray and using the prepared spray wear safety goggles, waterproof gloves, cotton overalls buttoned to the neck and wrist, and boots.
Eng. Controls	Handle in well ventilated areas, generally natural ventilation is adequate.
Hygiene Measures	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

Appearance	Beige granules
Odour	Scorched vanilla
Solubility in Water	Disperses in water. 0.015g/L @ pH5; 1.65mg/L @ pH7 (20°C) for halosulfuron-methyl
pH Value	7.9 (1% solution)
Vapour Pressure	<0.01mPa (25°C) for halosulfuron-methyl
Partition co-efficient, n-octanol/water	Kow logP = -0.0186 (pH7, 23°C) for halosulfuron-methyl
Flammability	Non combustibile material.
Other Information	(WG) Water Dispersible Granule

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions of handling and storage.
Hazardous Polymerization	Hazardous polymerisation will not occur.
Materials to Avoid	May react with strong bases, acids or strong oxidizing agents, such as chlorates, nitrates, peroxides. Do not use chlorine bleach with ammonia. All traces of liquid fertilizer containing ammonium nitrate or ammonium sulphate must be rinsed with water from the mixing and application equipment before adding chlorine bleach solution. Failure to do so will release a gas with a musty chlorine odour which can cause eye, nose, throat and lung irritation. Do not clean equipment in an enclosed area.
Conditions to Avoid	High temperatures.

11. TOXICOLOGICAL INFORMATION

Inhalation	Not a likely route of exposure when handling the concentrate. However, care should be taken to avoid the inhalation of excessive amounts of spray mist during field spraying, respiratory irritation may occur.
Ingestion	Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. However, swallowing of large amounts may cause injury.
Skin	The concentrated product may cause slight irritation on contact.
Eye	May cause some discomfort if contact is prolonged.
Reproductive Toxicity	Data indicates no reproductive effects. Data indicates no teratogenic effects.
Mutagenicity	Data indicates no mutagenic effects.
Carcinogenicity	Data indicates no carcinogenic effects.

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Acute Toxicity - Oral	LD50 (mouse) 2,514mg/kg
Acute Toxicity - Dermal	LD50 (rabbit) >2,000 mg/kg
Acute Toxicity - Inhalation	LC50 (rat) >5.7mg/L
Eye Irritation	Mild eye irritant.
Skin Irritation	Not a skin irritant.
Skin Sensitisation	Product is not a skin sensitiser.
Subchronic/Chronic Toxicity	Target organ toxicant: blood system
Other Information	The Australian Acceptable Daily Intake (ADI) for halosulfuron-methyl for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 1 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', March 2013).

12. ECOLOGICAL INFORMATION

Environ. Protection	Avoid contamination of any water supply with product or empty container.
Acute Toxicity - Fish	LC50 (96h) rainbow trout >134mg/L
Acute Toxicity - Daphnia	EC50 (48h) daphnia magna 166mg/L
Acute Toxicity - Algae	EC50 (72h) S. capricornutum 0.006mg/L
Acute Toxicity - Other Organisms	Birds: LD50 (bobwhite quail) >2,250mg/kg for halosulfuron-methyl Bees: LD50 (apis mellifera) oral/contact >100µg/bee for halosulfuron-methyl Worms: LD50 (Eisenia foetida) >1,000mg/kg soil for halosulfuron-methyl

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

U.N. Number	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs. 3077
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. - (halosulfuron-methyl, 75%)
DG Class	9
Hazchem Code	2X
Packaging Method	-
Packing Group	III
EPG Number	-
IERG Number	47
IMO Marine Pollutant	Yes. Environmentally Hazardous Substance mark required.
IMDG EMS	F-A, S-F
Other Information	Do not carry more than 3kg of SEMPRA 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



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Packaging & Labelling HARMFUL * ECOTOXIC - keep out of reach of children
Hazard Rating NFPA/HMIS: 2-1-0
Systems
Hazard Category HARMFUL * ECOTOXIC - Keep out of reach of children
National Legislation Registered pursuant to the ACVM Act 1997, No. P4427
See www.foodsafety.govt.nz for registration conditions
Approved pursuant to the HSNO Act 1996, Approval Code HSR000514
See www.epa.govt.nz for approval controls.
UK Legislation info@nz.nufarm.com

16. OTHER INFORMATION

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
SDS History November 2012
Revisions The SDS was reviewed due to a formulation change. Various changes have been
Highlighted made through out this document.
Hazard Category HARMFUL * ECOTOXIC - Keep out of reach of children
...End Of MSDS...

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