1. Identification

GHS Product Identifier: Sempra Herbicide
Product Code: 0727
Product Type: Group B Herbicide
Company Name: NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
Address: 103-105 Pipe Road Laverton North
Victoria 3026 Australia
Telephone/Fax Number: Tel: +61 3 9282-1000
Fax: +61 3 9282-1001
Emergency phone number: 1800 033 498 (24hr Australia)

Recommended use of the chemical and restrictions on use:
For selective post-emergence control of Nutgrass in Sugarcane, Corn/Maize and Sorghum; for the selective post-emergence control of Nutgrass and Mullumbimby couch in Turf; and for the selective post-emergence control of Navua sedge in Pasture. Also for the control of Nutgrass in Cotton using shielded sprayers as per the Directions for Use table on the Label.

READ COMPLETE DIRECTIONS FOR USE BEFORE USING THIS PRODUCT.
The physical properties and the assessments may not apply to the properties of the product once it has been diluted for application.

2. Hazard Identification

General: If medical advice is needed, have product container or label at hand.
Precautionary Statement(s):
- Keep out of reach of children.
- Read label before use.

Other Information:
Poisons Schedule S5
Not classified as hazardous under the GHS criteria.

3. Composition/information on ingredients

Chemical Characterization:
- Solid

Ingredients:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halosulfuron - methyl</td>
<td>100784-20-1</td>
<td>750 g/kg</td>
</tr>
<tr>
<td>Other Ingredients</td>
<td>Balance</td>
<td></td>
</tr>
</tbody>
</table>

4. First-aid measures

Inhalation: Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.
Ingestion: Rinse mouth thoroughly with water.
- Give a glass of water.
- Obtain medical advice.
Skin: If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water.
- Remove contaminated clothing and launder before re-use.
Eye contact: If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.
- Seek medical advice.

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

5. Fire-fighting measures

Suitable extinguishing media: If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.
Hazards from Combustion:
- Non-flammable.
- Non-combustible.
- If involved in a major fire, could evolve oxides of nitrogen, sulphur or hydrogen chloride.
Safety Data Sheet

Product Name: Sempra Herbicide

Not classified as hazardous

Breathable air apparatus may have to be worn in confined spaces.

STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

6. Accidental release measures
Spills & Disposal: Collect spilled material and waste in sealable open-top type containers for disposal. Dispose of at a landfill in accordance with local regulations. 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: No special precautions are necessary when handling sealed containers. Do NOT contaminate dams, rivers or streams, or any other water bodies with pesticide or used containers. Avoid generating dusts while handling the product and mixing. If dusts are generated, it is advisable to wear a dust mask, refer Section 8. For personal protective equipment (PPE) and hygiene advice, refer Section 8.

Conditions for safe storage, including any incompatibilities: Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight.

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

Other Information: Always read the label and any attached leaflet before use.

8. Exposure controls/personal protection
Appropriate engineering controls: Handle in well ventilated areas, generally natural ventilation is adequate.

Respiratory Protection: Do not inhale spray mist. If dusts are present, wear a class P1 dust mask.

Personal Protective Equipment: When preparing product for use wear elbow-length PVC gloves and face shield or goggles. Keep people and pets off treated areas until the spray solutions dried.

Hygiene Measures: After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. Showering at the end of the working day is recommended. After each day's use, wash contaminated clothing and safety equipment.

Requirements Concerning Special Training: Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

9. Physical and chemical properties
Form: Solid

Appearance: Beige Granules

Odour: Scorched vanilla

Solubility in Water: Disperses in water. 15 mg/l @ pH5; 1650 mg/l @ pH7

pH: 7.9 (1% solution)

Vapour Pressure: <0.01mPa (25°C)

Partition Coefficient: Kow Log P is -0.0186

n-octanol/water

Flammability: Non combustible material.

Other Information: pKa is 3.44
Safety Data Sheet

Infosafe No™ 3NU00L

Issue Date : January 2016

ISSUED by NUFARM

Product Name Sempra Herbicide

Not classified as hazardous

10. Stability and reactivity

Chemical Stability

Stable under normal conditions.

Hazardous Polymerisation

Hazardous polymerisation is not possible.

11. Toxicological Information

Acute Toxicity - Oral

LD50 (rat, M/F) 2825/1947 mg/kg

Acute Toxicity - Dermal

LD50 (rabbit) >2000 mg/kg

Acute Toxicity - Inhale

LC50 (rat) (4hr) >5.7 mg/l

Ingestion

Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. However, swallowing of large amounts may cause injury.

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. The concentrated product may cause slight irritation on contact.

Skin

May cause some discomfort if contact is prolonged.

Eye

Data indicates no mutagenic effects.

Carcinogenicity

Data indicates no reproductive effects.

Reproductive Toxicity

Data indicates no teratogenic effects.

Serious eye damage/irritation

Mild eye irritant.

Skin Sensitisation

Product is not a skin sensitisier.

Skin corrosion/irritation

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', December 2014).

12. Ecological information

Persistence and degradability

Not readily biodegradable.

Other Precautions

Do not graze any treated turf or feed turf clippings from any treated area to poultry or livestock.

Spray drift should be avoided, read the label for more information.

Marine pollutant.

After spraying, the first flush irrigation tailwater or stormwater run-off from land treated with Sempra should be prevented from entering waterways. Where farms do not have the capacity to retain run-off, DO NOT irrigate to the point of run-off for at least 6 days after application.

Acute Toxicity - Fish

LC50 (96hr) for (carp) is 340 ppm.

The following is data for the active ingredient, halosulfuron-methyl.

LC50 (96hr) for (trout) is >120 mg/l.

LC50 (48hr) for (daphnia) is 170 ppm.

Acute Toxicity - Daphnia

EC50 (72hr) for pseudokirchneriella subcapitata 0.0053 mg/l.

Acute Toxicity - Algae

Acute Toxicity - Other Organisms

Birds: Not toxic to birds. LD50 for (bobwhite quail) is 2250 mg/kg

Bees: Not toxic to bees. LD50 >100 µg/bee.

Sempra is very highly toxic to duckweed.

13. Disposal considerations

Print Date: 14/01/2016

Page: 3 of 4
Not classified as hazardous

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®).

Do not dispose of product on site. Triple rinse containers before disposal. Add rinsings to the spray tank.

If recycling, replace cap and return clean containers to recycler or designated collection point.

If not recycling, break, crush or puncture and deliver empty packaging for appropriate disposal at an approved waste management facility.

If an approved waste management facility is not available, bury the empty packaging 500mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations.

DO NOT burn empty containers or product.

Container Disposal

14. Transport Information

Storage and Transport
Considered non dangerous for road and rail transport (in packaging) by the Australian Code for the Transport of Dangerous Goods by Road and Rail. Ref: ADG7; SP No. AU01.

For bulk shipments as Class 9, use UN 3077, HazChem code 2Z.

15. Regulatory Information

Regulatory Information
WHS Schedule 11: not listed.

Poisons Schedule
S5

Packaging & Labelling

KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Other Information
This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA). APVMA product number: 56620.

16. Other Information

Date of preparation or last revision of SDS
Revised 14/01/2016.
This SDS replaces document dated November 2014.

Contact
Normal Hours: Mrs Kathleen Marsh Phone: +61 3 9282 1000
After Hours: Shift Supervisor Phone: 1800 033 498

Revisions
The SDS was reviewed. Various changes were made to the information.
Section 1 - Recommended use pattern information.
Section 7 - Cleaning of spray equipment.
Section 13 - Container disposal information.

...End Of MSDS...