Material Safety Data Sheet

Product Name: Simazine 900DF Herbicide

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Simazine 900DF Herbicide
Product Code: 0747
Product Type: Group C Herbicide
Company Name: NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
Address: 103-105 Pipe Road Laverton North Victoria 3026 Australia
Emergency Tel.: 1800 033 498 (24hr Australia)
Telephone/Fax Number: Tel: +61 3 9282-1000 Fax: +61 3 9282-1001
Recommended Use: For the control of weeds in a range of horticultural and broadacre crops, forestry and in non-crop situations as per the directions for use table.

2. HAZARDS IDENTIFICATION

Hazard Classification: Classified as hazardous
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
R40(3) Possible risk of irreversible effects.

Safety Phrase(s): S36/37 Wear suitable protective clothing and gloves.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization: Solid
Name | CAS | Proportion
--- | --- | ---
Simazine | 122-34-9 | 900 g/kg
Talc | 14807-96-6 | <50 g/kg
Dispersants | N/A | Balance

4. FIRST AID MEASURES

Inhalation: Remove affected person to fresh air until recovered.
Ingestion: 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.
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 the Poisons Information Centre (Australia) on 13 11 26.
Advice to Doctor: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water, foam, carbon dioxide or dry chemical.
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Hazard from Combustion Products: Non-flammable.
- If involved in a fire, it will emit oxides of nitrogen, oxides of carbon and possibly hydrogen chloride.

Special Protective Equipment for fire fighters: Breathable air apparatus may have to be worn if material is involved in fires especially in confined spaces.

Other Information: STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal: Recover the product by sweeping up or vacuuming without raising dust. Collect spilled material and waste in sealable open-top type containers for disposal.

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. Contaminated earth (after a spill) can be treated with lime to hasten decomposition of the active ingredient.

7. HANDLING AND STORAGE

Precautions for Safe Handling: For personal protective equipment (PPE) and hygiene advice, refer Section 8.
- If dusts are generated, it is advisable to wear a dust mask, refer Section 8.

Conditions for Safe Storage: Store in the closed, original container in a dry, well ventilated area, as cool as possible.

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards: No exposure standard for this product has been set, however, an exposure standard has been set for Talc at 2.5 mg/m3.

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

Respiratory Protection: If dusts are present, wear a class P1 dust mask.

Personal Protective Equipment: It is good practice to wear suitable personal protective equipment (PPE).
- 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 PVC gloves and 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.

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: Solid

Appearance: Light tan granular powder

Odour: Odourless

Melting Point: 225 - 227°C for simazine technical

Solubility in Water: Solubility of simazine technical is 0.062 @ 25°C

Vapour Pressure: <0.001kPa for simazine technical

Octanol/Water Partition Coefficient: LogP 2.1 (25°C) for simazine technical

Flammability: Combustible
- Danger of dust explosion.

10. STABILITY AND REACTIVITY
Simazine 900DF Herbicide

11. TOXICOLOGICAL INFORMATION

**Chemical Stability**
Subject to hydrolysis and sublimation at high temperatures.

**Hazardous Polymerization**
Hazardous polymerisation is not possible.

**Inhalation**
Inhalation of dust may result in respiratory irritation.

**Ingestion**
The concentrate is of low toxicity if swallowed.

**Skin**
Not a likely route of exposure due to the physical nature of the product.

**Eye**
May irritate the eyes.

**Carcinogenicity**
Worksafe Australia has classified simazine in the occupational environment as a Carcinogen Category 3 substance. This means that the substance is not classifiable as to carcinogenicity to humans.

Simazine has been assessed in animals and some data exists that simazine is a substance which causes some concern for humans owing to possible carcinogenic effects from long term exposure, but in respect of which the available information is not adequate for making a satisfactory assessment.

**Acute Toxicity - Oral**
LD50 (rat) >5,000 mg/kg for simazine

**Acute Toxicity - Inhalation**
LC50 (rat) (4hr) >5.5 mg/l for simazine

**Eye Irritation**
Not an eye irritant.

**Skin Irritation**
Not a skin irritant.

**Other Information**
The Australian Acceptable Daily Intake (ADI) for simazine for a human is 0.005 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.5 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 2008).

12. ECOLOGICAL INFORMATION

**Persistence / Degradability**
Half life in soil is typically 60 days. (Range 27 - 102 days).

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

**Acute Toxicity - Fish**
The following is data for the active ingredient, simazine.
Not toxic to fish. LC50 (96 hr) for rainbow trout is >100 mg/l.

**Acute Toxicity - Daphnia**
LC50 (48hr) for daphnia is >100 mg/l for simazine.

**Acute Toxicity - Algae**
EC50 (72hr) for Scenedesmus subspicatus is 0.04 mg/l.

**Acute Toxicity - Other Organisms**
The following data is for the active ingredient, simazine.
Birds: Not toxic to birds. LD50 for mallard duck is >2000 mg/kg
Bees: Not toxic to bees. LD50 >99 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**
Thoroughly wash out the inner and add washings to the spray tank. Dispose of washed inner and cardboard box in 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

**Storage and Transport**
Considered non dangerous for road and rail transport (in packaging, including IBCs not greater than 3000 Lt each) by the Australian Code for the Transport of Dangerous Goods by Road and Rail. Ref: ADG7; SP No. AU01.
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For bulk shipments as Class 9, use UN 3077, HazChem code 2Z.

UN Number (Sea Transport) 3077
IMO Class/Packing Group Class 9
IMO Marine Pollutant Marine Pollutant
IMO Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains Simazine)

15. REGULATORY INFORMATION

Poisons Schedule Not Scheduled
Packaging & Labelling Not to be used for any purpose or in any manner contrary to the label unless authorised under appropriate legislation.
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 Revised 30/06/2009
Contact Normal Hours: Mr Volker Maier Phone: +61 3 9282 1000
After Hours: Shift Supervisor Phone: 1800 033 498
Revisions The MSDS was reviewed. Minor changes were made to the information.
Highlighted ...End Of MSDS...