

# MATERIAL SAFETY DATA SHEET

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Date of Issue: October 2012  
MSDS No. FMC/SIM900/1

## SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name: FMC Simazine 900 WG Herbicide**

**Other Names:** Simazine. Group C Herbicide.  
**Use:** Agricultural herbicide for the control of weeds.  
**Company:** FMC Crop Protection Pty Ltd.  
**Address:** Unit 26, 8 Metroplex Avenue, Murarrie, Qld 4172  
**Telephone Number:** 07 3908 9222 **Fax Number:** 07 3908 9221  
**Emergency Telephone Number:** 1800 033 111 (All hours - Australia wide).

## SECTION 2 HAZARDS IDENTIFICATION

**Classified as hazardous according to criteria of the Safe Work Australia.  
Not Classified as a Dangerous Good according to the ADG Code.**

**Risk phrases:** R40 Limited evidence of a carcinogenic effect.  
**Safety Phrases:** S2 Keep out of reach of children.  
S13 Keep away from food, drink and other animal foodstuffs.  
S24/25 Avoid contact with skin and eyes.  
S36/37 Wear suitable protective clothing and gloves.

## SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

### Ingredients:

<b>CHEMICAL</b>	<b>CAS NUMBER</b>	<b>PROPORTION</b>
Simazine	122-34-9	900 g/kg
Talc	14807-96-6	< 5%
Other ingredients determined not to be hazardous		< 10%

## SECTION 4 FIRST AID MEASURES

### FIRST AID

**Swallowed:** If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label, or contact the Poisons Information Centre, phone Australia 13 11 26. Make every effort to prevent vomit from entering the lungs by careful placement of the patient.

**Eye:** Gently brush granules away and rinse with water. If irritation occurs and persists, seek medical advice.

**Skin:** Gently brush granules away. Wash skin with soap and water. If irritation occurs and persists, seek medical advice. Irritation is not expected.

**Inhaled:** Remove affected person to fresh air and observe until recovered.

**Advice to Doctor:** Treat symptomatically. No specific antidote.

**SECTION 5 | FIRE FIGHTING MEASURES**

**Specific Hazard:** Not flammable. If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material. Contain all runoff.

**Extinguishing media:** Preferably extinguish fire using carbon dioxide, foam or dry agent. If not available, use waterfog or fine water spray but ensure all runoff is contained.

**Hazards from combustion products:** There is no risk of an explosion from this product under normal circumstances if involved in a fire. If involved in a fire, it will emit oxides of nitrogen, oxides of carbon and possibly hydrogen chloride. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk to of exposure to vapour or smoke.

**Precautions for fire-fighters and special protective equipment:** Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe or contact smoke, gases or vapours generated.

**SECTION 6 | ACCIDENTAL RELEASE MEASURES**

**Emergency procedures:** Isolate and post spill area. Wear prescribed protective clothing and equipment. Large spills should be dyked or covered to prevent dispersal. Recover the product by sweeping up or vacuuming without raising dust. Collect spilled material and waste in sealable open-top type containers for disposal. Vacuum, shovel or pump spilled material into an approved container and dispose of as listed below. Keep out unprotected persons and animals.

**Material and methods for containment and cleanup procedures:** To decontaminate spill area, tools and equipment, wash with detergent and water and add the solution to the drums of wastes already collected and label contents. Absorb, as above, any excess liquid and add both solutions to the drums of waste already collected. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities. Contaminated earth (after a spill) can be treated with lime to hasten decomposition of the active ingredient.

Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways. This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

**SECTION 7 | HANDLING AND STORAGE**

**Precautions for Safe Handling:** Ensure containers are kept closed until using product. It is good practice to wear suitable personal protective equipment. If dusts are generated, it is advisable to wear a dust mask. Wash hands after use.

**Conditions for Safe Storage:** DO NOT store near (or allow to contact) fertilizers, fungicides or pesticides. Store in the closed original container, in a cool well ventilated area, out of direct sunlight. Store in a room or place away from children, animals, food, feed stuffs, seed and fertilizers. Not classified as a Dangerous Good.

**SECTION 8 | EXPOSURE CONTROLS / PERSONAL PROTECTION****National Exposure Standards:**

Exposure guidelines have not been established for this product by Safe Work Australia, however, an exposure standard has been set for Talc at 2.5 mg/m<sup>3</sup>.

**Biological Limit Values:**

No biological limit allocated.

**Engineering controls:**

Use in ventilated areas only. Use local exhaust at all process locations. Ventilate all transport vehicles prior to unloading. Keep containers closed when not in use.

**Personal Protective equipment (PPE):**

General: It is good practice to wear suitable personal protective equipment such as cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length chemical resistant gloves. Wash thoroughly before smoking, eating or using toilet facilities. Wash hands after use.

**SECTION 8 | EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)****Personal Protective equipment (PPE):** (Continued)

**Respiratory Protection:** Generally not required. Use of a respirator may be required in certain circumstances. If an inhalation risk exists, wear a properly fitted half-face or full-face air-purifying respirator which is approved for pesticides (Australian Standards).

**Personal Hygiene:** Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

**SECTION 9 | PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Light tan granular powder.
<b>Odour:</b>	Odourless.
<b>Melting Point:</b>	No data.
<b>Solubility in Water:</b>	Product disperses in water.
<b>Vapour Pressure:</b>	<0.001 kPa for Simazine technical.
<b>Flammability:</b>	Combustible at high temperatures.
<b>Formulation type:</b>	Water Dispersible Granule (WG).
<b>Poison Schedule:</b>	Not a scheduled Poison.

**SECTION 10 | STABILITY AND REACTIVITY**

**Chemical Stability:** Product is considered stable in ambient conditions for a period of at least 2 years after manufacture.

**Conditions to avoid:** Keep cool and dry until ready to use. Protect from sunlight.

**Incompatible materials:** Strong oxidizing agent such as chlorates, nitrates, peroxides etc.

**Hazardous decomposition products:** This product will decompose when burnt. Carbon dioxide, carbon monoxide, nitrogen and its compounds and oxides, smoke and in some circumstances hydrogen cyanide gas may be produced.

**Hazardous reactions:** Avoid contact of the concentrate with strong alkalis and alkaline materials such as lime. Polymerisation is unlikely.

**SECTION 11 | TOXICOLOGICAL INFORMATION**

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on similar products and/or individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimise exposure.

**Swallowed:** Slight to moderate toxicity. Acute Oral LD<sub>50</sub> > 2000 mg/kg (rats).

**Eye:** The granules can cause physical discomfort if in the eye causing irritation, stinging, reddening and watering of the eyes. Simazine is not irritating.

**Skin:** Not a likely route of exposure due to the physical nature of the product. This product is non irritating and non sensitising to the skin. Acute dermal LD<sub>50</sub> > 2,000 mg/kg (rats) and > 10,000 mg/kg (rabbits).

**Inhaled:** Inhalation of dust may result in respiratory irritation. As this is a granule and the acute oral toxicity was very low, no studies have been performed. Toxicity by inhalation is expected to be very low.

**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.

**SECTION 12 | ECOLOGICAL INFORMATION**

**Environmental Toxicology:** Simazine is practically nontoxic to birds. The reported LD<sub>50</sub> values in mallard and Japanese quail are > 4600 mg/kg and 1785 mg/kg, respectively. Similar high values are reported for other species. Simazine is slightly to practically nontoxic to most aquatic species. However, highly to very highly toxic to various species of algae. While many mammals may be insensitive to Simazine, sheep and cattle are especially sensitive. Simazine is nontoxic to bees. A soil LC<sub>50</sub> in earthworms of >1000 mg/kg has been reported.

**Environmental Properties:** Simazine is moderately persistent with an average field half-life of 60 days. Reported soil half-lives range from 28 to 149 days. Residual soil activity (at rates of 2 – 4 kg/ha) may remain for a year after application in high pH soils. Simazine is moderately to poorly bound to soils. It does, however, adsorb to clays and mucks. Its low water solubility, however, makes it less mobile, limiting its leaching potential. The average half-life of Simazine in ponds where it has been applied is 30 days, with the actual half-life dependent on the level of algae present, the degree of weed infestation, and other factors. Simazine may undergo hydrolysis at lower pH. It does not readily undergo hydrolysis in water at pH = 7. Plants absorb Simazine mainly through the roots, with little or no foliar penetration. From the roots, it is translocated upward to the stems, leaves, and growing shoots of the plant. It acts to inhibit photosynthesis. Resistant plants readily metabolize Simazine. Plants that are sensitive to Simazine accumulate it unchanged. It is possible that livestock or wildlife grazing on these plants could be poisoned.

**SECTION 13 | DISPOSAL CONSIDERATIONS**

**Spills & Disposal:** Isolate and post spill area. Wear prescribed protective clothing and equipment. Large spills should be dyked or covered to prevent dispersal. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. To decontaminate spill area, tools and equipment, wash with detergent and water and add the solution to the drums of wastes already collected and label contents. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities.

**Disposal of empty containers:** Shake empty bag into spray tank. Single rinse plastic bags before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals onsite. Puncture or shred and bury empty containers in a 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 products are not to be burnt.

**SECTION 14 | TRANSPORT INFORMATION**

**Storage & Transport:** FMC Simazine 900 WG Herbicide is not classified as Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail in containers less than 3000 litres as per ADG7, SP No. AU01. For bulk shipments as Class 9, use UN 3077, Hazchem code 2Z.

**Marine and Air Transport:** FMC Simazine 900 WG Herbicide is a Marine Pollutant according to International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA). If transporting by sea or air the following Dangerous Goods Classification applies:-

UN 3077;

Class 9 (Miscellaneous Dangerous Goods);

Packing Group III;

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains Atrazine).

Not to be loaded with explosives (Class 1), oxidising agents (Class 5.1), organic peroxides (Class 5.2), however specific exemptions may apply.

**SECTION 15 REGULATORY INFORMATION**

Classified as a hazardous substance according to criteria of the Safe Work Australia. (Xn - harmful). Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is not a scheduled poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 67820.

Product is not classified as a Dangerous Good according to the ADG Code (7<sup>th</sup> Ed).

**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.

**SECTION 16 OTHER INFORMATION**

Issue Date: 12 October 2012. Valid for 5 years. (First issue).

Key to abbreviations and acronyms used in this MSDS:

ADG Code: Australian Dangerous Goods Code (for the transport of Dangerous Goods by Road and Rail).

ASCC: Australian Safety & Compensation Council (formally known as the National Occupational Health & Safety Commission (NOHSC)).

Carcinogen: An agent which is responsible for the formation of a cancer.

Genotoxic: Capable of causing damage to genetic material, such as DNA.

Lacrimation: The production, secretion, and shedding of tears.

Lavage: A general term referring to cleaning or rinsing.

NOHSC: National Occupational Health and Safety Commission.

Pneumonitis: A general term that refers to inflammation of lung tissue.

PPE: Personal protective equipment.

Teratogen: An agent capable of causing abnormalities in a developing foetus.

TWA: The Time Weighted Average airborne concentration over an eight-hour working day, for a five day working week over an entire working life.

Safe Work Australia: Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC).

**References**

1. "Search Hazardous Substances". Safe Work Australia website. (2012).
2. "Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.
3. Standard for the Uniform Scheduling of Medicines and Poisons. No. 3. Medicines and Poisons Scheduling Secretariat. June 2012.

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

*End of MSDS*