SAFETY DATA SHEET

SECTION 1

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: AgMerch Glyphosate 700 SG Herbicide

Other Names: Use: Company: Address: ACN/ABN: Email: Emergency Contact: Glyphosate ammonium salt, Group 9 Herbicide. A non-selective, systemic, water-soluble herbicide. AgMerch Pty Ltd 217 Wyndham Street, Shepparton, Vic 3630 26 645 371 017 info@agmerch.com.au 0498 530 214

SECTION 2

HAZARDS IDENTIFICATION

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

* Under Safe Work Australia this product is not classified as a hazardous substance. Under the Globally Harmonised System (GHS) this product is a hazardous substance with the following classification:

Globally Harmonised System (GHS) classification of the substance/mixture:

Hazardous to the Aquatic Environment – Long term hazard: Category 2.

Signal Word: No signal word.

Hazard Statements:

H411 Toxic to Aquatic life with long lasting effects.

Precautionary statements:

Prevention: P273 Avoid release to the environment.

Response:

P391 Collect spillage

Disposal:

P501 Dispose of contents/container in accordance with national regulations

Pictogram:



SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CHEMICAL	CAS NUMBER
Glyphosate as the ammonium salt	114370-14-8
Other ingredients (including water) determined not to be hazardous	

PROPORTION 510 g/L Balance **SECTION 4**

FIRST AID MEASURES

FIRST AID		
Ingestion:	If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 131 126. Wash mouth with water and give water to drink.	
Eye contact:	If in eyes, immediately flush with clean water until chemical is removed. If irritation occurs and persists, obtain medical attention.	
Skin contact:	Wash skin with soap and water. If skin irritation persists, seek medical advice. Remove contaminated clothing and launder before re-use.	
Inhalation:	Remove to fresh air and observe until recovered. If effects persist, seek medical advice. Not expected to be a source of over-exposure.	
Advice to Doctor: Treat symptomatically.		

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing media: Not flammable. No risk of explosion if involved in a fire. Extinguish fire using media suited to burning material. If containers are ruptured contain all runoff.

Hazards from combustion products: Product is likely to decompose with strong heating and will emit toxic fumes. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or smoke.

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

SECTION 6 ACCIDENTAL RELEASE MEASURES

Emergence procedures: In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear elbow-length PVC gloves and goggles. If there is a significant chance that dusts are likely to build up in the cleanup area, the use of a suitable dust mask is recommended.

In the case of spillage, stop leak if safe to do so, and contain spill. Prevent spillage entering drains or watercourses. Large spills should be dyked or covered to prevent dispersal. If possible, granules may be recovered and used for their intended use. Vacuum shovel or pump spilled material into an approved container and dispose of waste as per the requirements of Local or State Waste Management Authorities. Keep out animals and unprotected persons.

Material and methods for containment and cleanup procedures: To clean spill area, tools and equipment, wash with a solution of soap, water and acetic acid/vinegar. Follow this with a neutralisation step of washing the area with a bleach or caustic soda ash solution. Finally, wash with a strong soap and water solution. Absorb, as above, any excess liquid and add both solutions to the drums of waste already collected.

SECTION 7

HANDLING AND STORAGE

Precautions for Safe Handling: No smoking, eating or drinking should be allowed where material is used or stored. Harmful if swallowed. Will damage eyes and will irritate the skin. Avoid contact with eyes and skin. When opening the container and preparing the product for use wear elbow-length PVC gloves and goggles. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

Conditions for Safe Storage: Not classified as a Dangerous Good. This product is a Schedule 5 Poison (S5) and must be stored, transported and sold in accordance with the relevant Health Department regulations. Store in the closed, original container in a well-ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

No exposure limits have been assigned by Safe Work Australia to the ingredients in this product.

Biological Limit Values: No biological limit allocated.

Engineering controls:

Keep containers closed when not in use. No special engineering controls are required, however make sure that the work environment remains clean and that vapours are minimised.

Personal Protective equipment (PPE):

When opening the container, preparing the spray wear elbow-length PVC gloves and face shield or goggles. After each day's use, wash contaminated clothing, gloves and face shield or goggles.

<u>Personal Hygiene</u>: 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

Appearance:	Slight yellow granule.
Odour:	No odour.
Boiling point:	No data available.
Freezing point:	No data available - solid at room temperature.
Specific Gravity:	No data
Solubility in Water:	Soluble.
pH:	4 - 7.
Flammability:	Not flammable.
Flashpoint (°C):	Not flammable.
Poisons Schedule:	This product is a schedule 5 (S5) 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: Do not store for prolonged periods in direct sunlight.

Incompatible materials: Avoid strong acids, bases and strong oxidizing agents.

Hazardous decomposition products: This product is likely to decompose if involved in a fire or other strong heating. Carbon dioxide, and if combustion is incomplete, carbon monoxide, smoke and other toxic fumes are likely to be formed.

Hazardous reactions: Avoid contact of the concentrate with strong alkalis and alkaline materials such as lime. Polymerisation will not occur.

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.

Potential Health Effects:

ACUTE EFFECTS

- **Swallowed:** Low acute toxicity. Direct ingestion may produce gastro-intestinal discomfort, nausea, vomiting and diarrhoea. Ingestion of a large quantity of the undiluted product may result in hypotension and pulmonary oedema. Acute Oral $LD_{50} > 5,000$ mg/kg.
- **Eye:** The granules may cause physical irritation of the eyes. Prolonged contact with the spray solution may cause damage to the eye.
- **Skin:** This product may be irritating to the skin. Acute dermal $LD_{50} > 5,000 \text{ mg/kg}$.
- Inhaled: Inhalation of mists or sprays may produce respiratory irritation.

TOXICOLOGICAL INFORMATION (Continued)

Long Term Exposure:

SECTION 11

Chronic toxicity: Studies of glyphosate lasting up to 2 years, have been conducted with rats, dogs, mice, and rabbits, and with few exceptions no effects were observed. Laboratory studies show that glyphosate produces reproductive changes in test animals very rarely and then only at very high doses (over 150 mg/kg/day). It is unlikely that the compound would produce reproductive effects in humans.

Glyphosate does not appear to be teratogenic, mutagenic or carcinogenic.

SECTION 12

ECOLOGICAL INFORMATION

Environmental Toxicology: Glyphosate is not harmful to wild birds. The dietary LC_{50} in both mallards and bobwhite quail is greater than 4500 ppm. Technical glyphosate acid is practically nontoxic to fish and may be slightly toxic to aquatic invertebrates. The reported 96-hour LC_{50} values for other aquatic species include greater than 10 mg/L in Atlantic oysters, 934 mg/L in fiddler crab, and 281 mg/L in shrimp. The 48-hour LC_{50} for glyphosate in Daphnia (water flea), an important food source for freshwater fish, is 780 mg/L. Some formulations may be more toxic to fish and aquatic species due to the surfactants used in the formulation. There is a very low potential for glyphosate to build up in the tissues of aquatic invertebrates or other aquatic organisms. Glyphosate is nontoxic to honeybees. It's oral and dermal LD_{50} is greater than 0.1 mg/bee. The reported contact LC_{50} values for earthworms in soil are greater than 5000 ppm.

Environmental Fate: Glyphosate is moderately persistent in soil, with an estimated average half-life of 47 days. Reported field half-lives' range from 1 to 174 days. It is strongly adsorbed to most soils, even those with lower organic and clay content. In water, glyphosate is strongly adsorbed to suspended organic and mineral matter and is broken down primarily by microorganisms. Its half-life in pond water ranges from 12 days to 10 weeks. Glyphosate may be translocated throughout the plant, including to the roots. It is extensively metabolized in some plants, while remaining intact in others.

SECTION 13

DISPOSAL CONSIDERATIONS

Spills and Disposal: Persons involved in cleanup require adequate skin protection - see Section 8. 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. Do not dispose of undiluted chemicals on site. Puncture or shred and bury empty containers in a local landfill. If no landfill is available, bury the containers below 500 mm in 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 regulations. Empty containers and product should not be burnt.

SECTION 14

TRANSPORT INFORMATION

Road & Rail Transport: This product is not classified as a Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail. This product is a Schedule 5 Poison (S5) and must be stored, transported and sold in accordance with the relevant Health Department regulations.

Marine and Air Transport: Product is a not classified as a Dangerous Good according to International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA).

SECTION 15

REGULATORY INFORMATION

Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is a schedule 5 poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No.90834.

SECTION 15 REGULATORY INFORMATION (Continued)

This product is not classified as a Hazardous Substance under the criteria of Safe Work Australia. Classified as a Hazardous Substance under GHS (Environmental only).

This product is not classified as a Dangerous Good according to the ADG Code (7th 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.

This product is not classified as a Dangerous Good according to International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA).

SECTION 16

OTHER INFORMATION

Issue Date: 21 September 2021. Valid for 5 years till 21 September 2026. (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).
- An agent which is responsible for the formation of a cancer. Carcinogen: Genotoxic: Capable of causing damage to genetic material, such as DNA. Hazardous Chemical Information System. HCIS: Lacrimation: The production, secretion, and shedding of tears. A general term referring to cleaning or rinsing. Lavage: An agent capable of producing a mutation. Mutagen: 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: Australian government statutory body established in 2008 to develop national policy relating to Worker Health & Safety and workers' compensation.

References

- 1. "Hazardous Chemicals Information System". Safe Work Australia HCIS website. (2021).
- 2. "Classifying Hazardous Substances" Safe Work Australia. August 2018.
- 3. Globally Harmonized System of Classification and Labelling of Chemicals (GHS). United Nations, 2017 (7th Ed).

This SDS 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 SDS 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 SDS