

SAFETY DATA SHEET

SECTION 1

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Apparent Glyphosate 360 Herbicide**

Other Names: Glyphosate, N-(phosphonomethyl)glycine, Group M Herbicide.
Use: A non-selective, systemic, liquid herbicide.
Company: Apparent Pty Ltd.
Address: Suite G.08 762 Toorak Road, Hawthorn East, Vic. 3123.
PO Box 3092, Cotham PO, Kew, Vic 3101
ACN/ABN: 143 724 136
Telephone Number: 03 9822 1321
Email: enquiries@apparentag.com.au
Emergency Contact: 0411 227 338

SECTION 2

HAZARDS IDENTIFICATION

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

Globally Harmonised System (GHS) classification of the substance/mixture:
Eye Damage/Irritation Category 1.

Signal Word: DANGER.

Hazard Statements:
H318 Causes serious eye damage.

Precautionary statements:
Prevention:
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.

Pictogram:



SECTION 3

COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:	CAS NUMBER	PROPORTION
CHEMICAL		
Glyphosate as the isopropylamine salt	38641-94-0	360 g/L
Surfactant	-	10 - < 30%
Other ingredients (including water) determined not to be hazardous		Balance

SECTION 4**FIRST AID MEASURES****FIRST AID**

Ingestion: If swallowed do NOT induce vomiting. Give a glass of water. If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 131 126.

Eye contact: Immediately hold eyes open and flood with clean water. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. Seek medical advice.

Skin contact: Remove contaminated clothing. Wash skin with soap and water. If skin is irritated, seek medical advice.

Inhalation: Remove to fresh air and observe until recovered. If effects persist, seek medical advice.

Advice to Doctor: Treat symptomatically.

SECTION 5**FIRE FIGHTING MEASURES**

Specific Hazard: Not flammable. No risk of explosion if involved in a fire.

Extinguishing media: Extinguish fire using media suited to burning material. If containers are ruptured contain all runoff.

Hazards from combustion products: Product is likely to decompose after heating to dryness and continued 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**

Emergency procedures: In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear overalls, elbow-length PVC gloves and face shield or goggles. In the case of spillage, stop leak if safe to do so, and contain spill. Absorb spilled material with absorbent material such as sand, clay or cat litter and dispose of waste as per the requirements of Local or State Waste Management Authorities. Wear prescribed protective clothing and equipment. 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. If a significant quantity of material enters drains, advise emergency services. Thoroughly launder protective clothing before storage or re-use.

SECTION 7**HANDLING AND STORAGE**

Precautions for Safe Handling: No smoking, eating or drinking should be allowed where material is used or stored. Product will irritate the eyes and skin. Avoid contact with eyes and skin. When preparing product for use, wear elbow-length PVC gloves and face shield or goggles. 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, gloves and face shield or goggles. When using controlled droplet applicator wear protective waterproof clothing and impervious footwear.

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 and mists are minimised.

Personal Protective Equipment (PPE):

General: When preparing product for use, wear elbow-length PVC gloves and face shield or goggles. 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, gloves and face shield or goggles. When using controlled droplet applicator wear protective waterproof clothing and impervious footwear.

Personal Hygiene: Product will irritate the eyes and skin. Avoid contact with eyes and skin. 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:	Viscous straw coloured/yellowish liquid.
Odour:	Slight amine odour.
Boiling point:	No data available - but expected to be approximately 100°C.
Freezing point:	No data available - but expected to be approximately 0°C.
Specific Gravity:	1.1 at 20°C.
Solubility in Water:	Soluble.
pH:	4.6 – 5.4.
Flammability:	Not flammable.
Flashpoint (°C):	Not flammable.
Poisons Schedule:	S5.
Formulation type:	Soluble Concentrate.
Corrosive hazard:	Spray solutions of this product should be mixed, stored and applied only in stainless steel, aluminium, brass, copper, fibreglass, plastic or plastic lined containers or spray tanks since a highly flammable gas may be formed. Do not mix or store the product or spray solutions in galvanized steel or unlined steel (except stainless steel).

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: Spray solutions of this product should be mixed, stored and applied only in stainless steel, aluminium, brass, copper, fibreglass, plastic or plastic lined containers or spray tanks since a highly flammable gas may be formed. Do not mix or store the product or spray solutions in galvanized steel or unlined steel (except stainless steel).

Incompatible materials: As above.

Hazardous decomposition products: This product is likely to decompose only after heating to dryness, followed by further strong heating. Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke.

Hazardous reactions: Avoid contact of the concentrate with strong alkalis and alkaline materials such as lime. Such contact may release isopropylamine vapour with a strong fish like odour, which is an irritant, to eyes. 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.

Potential Health Effects:**ACUTE EFFECTS**

Swallowed: Low 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 LD₅₀ > 5,000 mg/kg.

Eye: The concentrate is not expected to cause irritation of the eyes. May cause redness and discomfort. Prolonged contact with the concentrate may cause damage to the eye.

Skin: Unlikely to cause skin irritation, but may be irritating to the skin of sensitive persons. Acute dermal LD₅₀ > 5,000 mg/kg.

Inhaled: Inhalation of mists or sprays may produce respiratory irritation.

Long Term Exposure:

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 LC₅₀ 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 LC₅₀ 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 LC₅₀ for glyphosate in Daphnia (water flea), an important food source for freshwater fish, is 780 mg/L. The surfactant used in this product has low toxicity to aquatic organisms. There is a very low potential for the compound to build up in the tissues of aquatic invertebrates or other aquatic organisms. Glyphosate is non-toxic to honeybees. Its oral and dermal LD₅₀ is greater than 0.1 mg/bee. The reported contact LC₅₀ 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 ranged 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. In case of spillage, contain and absorb spilled material with absorbent material such as clay, sand or cat litter. Vacuum, shovel or pump waste into an approved drum and dispose of waste per the requirements of Local or State Waste Management Authorities. Keep out animals and unprotected persons. Keep material out of streams and sewers.

If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®). This product is a herbicide and spills can damage crops, pastures and desirable vegetation. Prevent from entering drains, waterways or sewers. Use earthen bunds or absorbent bunding to prevent spreading of spillage.

SECTION 13 DISPOSAL CONSIDERATIONS (Continued)

Disposal of empty containers: Triple-rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. 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 to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm 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.

SECTION 14 TRANSPORT INFORMATION

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

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. 66640.

This product is classified as a Hazardous Substance under the criteria of Safe Work Australia.

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

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: 18 July 2016. Valid for 5 years till 18 July 2021 (Revised to GHS).

Key to abbreviations and acronyms used in this SDS:

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

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

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

Mutagen: An agent capable of producing a mutation.

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

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". Australian Safety and Compensation Council website. (2016).
2. "Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.
3. Globally Harmonized System of Classification and Labelling of Chemicals (GHS). United Nations, 2009.

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.