

SAFETY DATA SHEET

Section 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	Innova Glyphosate 450 Herbicide
Other Names:	Product code: A14816B
Recommended Use:	A water soluble herbicide for non-selective control of many annual and perennial weeds in conservation tillage situations.
Company Details:	Syngenta Crop Protection Pty Limited ABN 33 002 933 717
Address:	Level 1, 2-4 Lyonpark Road MACQUARIE PARK NSW 2113 AUSTRALIA
Telephone Number:	(02) 8876 8444
Emergency Telephone Number:	24 hours - 1800 033 111

Section 2: HAZARDS IDENTIFICATION

Hazard Classification:	Hazardous according to the criteria of NOHSC Australia
Risk Phrases:	R36. Irritating to eyes.
Safety Phrases:	-

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE	
Chemical Identity of Pure Substance:	Glyphosate (present as the isopropylamine salt)
Synonym:	ASF71
CAS Number:	81591-81-3

MIXTURE		
Chemical Identity of Ingredients	CAS No	Proportion (% w/v)
Glyphosate present as the isopropylamine salt	1071-83-6	45
Surfactant	-	10
Other ingredients determined not to be hazardous	-	to 100

Section 4: FIRST AID MEASURES

Description of Necessary First Aid Measures:	<p>In case of poisoning by any exposure route contact a doctor or Poisons Information Centre on 131 126. Have the product label or SDS with you when calling or going for treatment.</p> <p>Ingestion: If swallowed, do NOT induce vomiting. Wash mouth with water. Do not give anything by mouth to a semi-conscious or unconscious person. Give a glass of water.</p> <p>Eye contact: Hold eyelids open and rinse immediately with plenty of water for at least 15 minutes.</p> <p>Skin contact: Remove contaminated clothing and wash affected areas with soap and water. Wash contaminated clothing before re-use.</p> <p>Inhalation: If inhaled, remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest.</p>
Poisoning Symptoms: Medical Advice:	<p>Poisoning symptoms in laboratory animals were non-specific.</p> <p>There is no specific antidote available. Treat symptomatically.</p>

Section 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	<p>If involved in a fire, the product will not burn. Choose extinguishing media to suit burning material. Water spray, foam, carbon dioxide or dry chemical. Do not use solid water stream as it may scatter and spread the fire.</p>
Hazards from Combustion Products:	<p>This product, or spray solutions of this product, react with galvanised steel or unlined steel (except stainless steel) containers and tanks, to produce hydrogen gas which form highly flammable or explosive gas mixtures. If involved in a major fire, could evolve oxides of nitrogen or phosphorus.</p>
Special Protective Precautions and Equipment for Fire Fighters:	<p>Wear full protective clothing and self-contained breathing apparatus. Surrounding containers should be cooled using a fine water spray. Do not allow run-off from fire fighting to enter drains or water courses.</p>
Hazchem Code:	<p>Non allocated.</p>

Section 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	<p>In case of spillage it is important to take all steps necessary to:</p> <ul style="list-style-type: none"> • Avoid eye and skin contact. • Avoid contamination of waterways.
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Methods and Materials for Containment and Clean Up:	<p>Procedure for spill:</p> <ol style="list-style-type: none"> (1) Keep all bystanders away. (2) Wear full length clothing and PVC gloves. (3) Reposition any leaking containers so as to minimise further leakage. (4) Dam and absorb spill with an absorbent material (e.g. sand or soil). (5) Shovel the absorbed spill into drums. (6) Disposal of the absorbed material will depend upon the extent of the spill. <ul style="list-style-type: none"> • For quantities up to 50L of product bury in a secure landfill site. • For quantities greater than 50L seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established. (7) Decontaminate the spill area with detergent and water and rinse with the smallest volume of water practicable.
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Section 7: HANDLING AND STORAGE

Precautions for Safe Handling:	<p>Product will irritate the eyes and skin. Avoid contact with eyes and skin. When preparing product for use wear:</p> <ul style="list-style-type: none"> • elbow-length PVC gloves • face shield or goggles <p>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.</p>
Conditions for Safe Storage:	<p>Store in the closed, original container in a cool, well ventilated area out of direct sunlight.</p>

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

National Exposure Standards:	No exposure standard allocated
Syngenta Exposure Standards:	Glyphosate isopropylamine 5mg/m ³ (8 h TWA)
Biological Limit Values:	No biological limit allocated
Engineering Controls:	No special requirements. Product is used outdoors.
Personal Protective Equipment:	<p>Product will irritate the eyes and skin. Avoid contact with eyes and skin. When preparing product for use wear:</p> <ul style="list-style-type: none"> • elbow-length PVC gloves • face shield or goggles <p>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.</p>

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear blue viscous liquid	Boiling Point/Range:	> 100°C
Odour:	Faint amine odour	Freezing/Melting Point:	No specific data
pH:	NA	Solubility:	Soluble in water
Vapour Pressure:	<1 x 10 ⁻⁵ Pa at 25 °C	Specific Gravity or Density:	1.20 g/mL

Flash Point:	Does not flash	Explosive Properties:	Not explosive
Upper and Lower Flammable (Explosive) Limits in Air:	No data	Oxidising Properties:	No data
Ignition Temperature:	No data	Combustibility:	Not combustible
		Corrosiveness:	Corrosive to steel

Section 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable under recommended storage and handling conditions. Do not mix, store or apply the product or spray solutions of the product in galvanised steel or unlined steel (except stainless steel) containers or spray tanks.
Conditions to Avoid:	Corrosive to mild steel, galvanised steel, and zinc. Unstable at extreme pH's and temperature.
Incompatible Materials:	Strong oxidising agents such as chlorates, nitrates, peroxides
Hazardous Decomposition Products:	Combustion or thermal decomposition will evolve toxic and irritant vapours. Contact with strong alkalis and alkaline materials like lime may release isopropylamine vapour with a strong fish like odour, which is irritant to eyes. Isopropylamine is moderately toxic, LD50 (oral rat) is 820 mg/kg and a TLV of 5 ppm (TWA) has been set.
Hazardous Reactions:	As above. Hazardous polymerisation does not occur.

Section 11: TOXICOLOGICAL INFORMATION

Health Effects from Likely Routes of Exposure:

Acute:	Oral toxicity:	Low toxicity LD ₅₀ (rat) > 5000 mg/kg for a similar formulation The concentrate is of low toxicity if swallowed. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. Possible symptoms of exposure include nausea, vomiting and gastrointestinal discomfort and diarrhoea. Ingestion of a large quantity of the undiluted product may result in hypotension and pulmonary oedema.
	Dermal toxicity:	Low toxicity LD ₅₀ (rabbit) > 2000 mg/kg for a similar formulation
	Inhalation:	Moderate toxicity LC ₅₀ (4 hours, rat for similar product) > 0.83 mg/L
	Skin irritation:	Moderate irritant
	Eye irritation:	Moderate irritant
	Sensitisation:	Not sensitising

Chronic: Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity:	Acute LC ₅₀ (96 hour) 8.2 - 26 mg/L (rainbow trout, similar product) Acute LC ₅₀ (96 hour) 5.8 -14 mg/L (bluegill sunfish, similar product)
Persistence and Degradability:	Average field half life of glyphosate is 47 days.
Mobility	Glyphosate has very low mobility.
Environmental Fate (Exposure):	-
Bioaccumulative Potential:	Glyphosate has low bioaccumulation potential.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Methods and Containers:	Store in the closed, original container in a cool, well ventilated area out of direct sunlight. For non refillable/returnable containers Triple or preferably pressure rinse empty 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 bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm 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. For refillable/returnable containers Empty contents fully into application equipment. Close all valves and return to point of storage for refill or storage.
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Special Precautions for Landfill or Incineration:	Not applicable.
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Section 14: TRANSPORT INFORMATION

LAND TRANSPORT	ADG	Not a dangerous good in Australia	
UN Number:	None allocated	Packing Group:	None allocated
UN Proper Shipping Name:	None allocated	Special Precautions for User:	None allocated
Class:	None allocated	Hazchem Code:	None allocated
Subsidiary Risk:	None allocated		

SEA TRANSPORT	IMDG	Not a dangerous good by marine transport	
UN Number:	None allocated	Packing Group:	None allocated
UN Proper Shipping Name:	None allocated	Special Precautions for User:	None allocated
Class:	None allocated	Hazchem Code:	None allocated
Subsidiary Risk:	None allocated	Marine Pollutant:	No

AIR TRANSPORT	ICAO / IATA	Not a dangerous good by air	
UN Number:	None allocated	Packing Group:	None allocated
UN Proper Shipping Name:	None allocated	Special Precautions for User:	None allocated
Class:	None allocated	Hazchem Code:	None allocated
Subsidiary Risk:	None allocated		

Section 15: REGULATORY INFORMATION

APVMA Product Number:	62045
Poisons Schedule (SUSDP):	S5

Section 16: OTHER INFORMATION

Date of preparation or last revision:	May 2008
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Source of Data: The information provided in this SDS is sourced from studies and publications which have been conducted according to Regulatory requirements including OECD and CIPAC Guidelines and EC Directives. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the government health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

Note: This product is a registered agricultural chemical and must, therefore, be used in accordance with the container label directions

CONTACT POINT: Regulatory Affairs Manager, Syngenta Crop Protection Pty Limited
(02) 8876 8444

24 HOURS EMERGENCY CONTACT: 1800 033 111

This Material Safety Data Sheet 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.

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