

MATERIAL SAFETY DATA SHEET

STATEMENT OF HAZARDOUS NATURE:

Hazardous according to the criteria of NOHSC Australia

COMPANY DETAILS:

Syngenta Crop Protection Pty Limited
ABN 33 002 933 717
140-150 Bungaree Rd.,
PENDLE HILL, NSW, 2145

Telephone No.: (02) 9688 0444
24 Hours Emergency No.: 1 800 033 111

IDENTIFICATION

PRODUCT NAME: TOUCHDOWN BROADACRE HERBICIDE

Formulation type:	emulsifiable concentrate	UN number:	none allocated
Active ingredient:	glyphosate trimesium	Dangerous goods class:	none allocated
Product code:		Subsidiary risk:	none allocated
Chemical type:	glycine	Hazchem code:	none allocated
Poisons schedule:	5	Packing group:	none allocated
		EPG/IERG:	none allocated

USE: A non-selective herbicide for control of a wide range of annual and perennial weeds.

PHYSICAL DESCRIPTION/PROPERTIES

Appearance:	clear pale to dark brown liquid	Flash Point:	does not flash
Odour:	sweet pungent	Flammability:	not applicable
Boiling point:	approx. 100°C	Combustibility:	non-combustible
Vapour pressure:	not available	Solubility in water:	soluble
Specific gravity:	1.24 g/cm ³ at 20°C		

OTHER PROPERTIES

pH (1% aqueous):	3.8 – 4.6	Auto-ignition temperature:	not applicable
Oxidising properties:	non-oxidising	Explosive properties:	not explosive

INGREDIENTS

	CAS No.	Content (%w/v)
Glyphosate trimesium technical grade (600 g/L glyphosate trimethylsulfonium salt)	81591-81-3	60%
Surfactants	----	10 – 29%
Fragrance	----	< 1%
Anti-foaming agent	----	< 1%
Water	7732-18-5	to 100%

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

ACUTE TOXICITY

This product is harmful according to NOHSC Australia.

Swallowed:

HARMFUL

Tests on rats indicate this product is HARMFUL following single oral doses of a similar formulation.

LD₅₀ male rat = 1418 - 2185 mg/kg

LD₅₀ female rat = 977 - 1723 mg/kg

Dermal absorption: **NOT HARMFUL**
 Tests on rabbits indicate this product is NOT HARMFUL following skin contact with a similar formulation.
 $LD_{50} > 2000$ mg/kg

Inhaled: **NOT HARMFUL**
 Tests on rats indicate this product is NOT HARMFUL due to inhalation of a similar formulation containing 19.5% active ingredient.
 $LC_{50} = 6.9$ mg/L

Irritation

Eye: **SLIGHT IRRITANT**
 Skin: **NON IRRITANT**

Sensitisation

Skin: **NOT A SENSITISER**

Poisoning symptoms:

Swallowing can result in abdominal pain, irritation of the mouth, throat and stomach and in severe cases stomach bleeding. Inhalation of mists or aerosols may produce respiratory irritation. No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label.

CHRONIC TOXICITY

Glyphosate technical has been extensively tested in mammals and in test-tube systems. No evidence of mutagenic, carcinogenic, neurotoxic or teratogenic effects was obtained. Daily oral administration of 2, 10 and 50 mg/kg (active constituent) to beagle dogs for 5 days/week for one year did not produce any significant toxicological effects. The NOAEL (no observable adverse effect level) was 5090 mg/kg body weight per day. Reproductive tests produced maternal effects (reduction in body weight and feed intake) and foetal effects (reduction in foetal body weight) at the highest dose (333 mg/kg) but no teratogenic effects at any dose level. The ADI (Acceptable Daily Intake) for humans is 0.3 mg/kg/day.

FIRST AID

In case of poisoning by any exposure route contact a doctor or Poisons Information Centre. Phone 13 11 26.

Swallowed: Give plenty of water to drink. Seek immediate medical assistance.

Eye: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Seek immediate medical assistance.

Skin: Wash contaminated skin with plenty of water. Remove contaminated clothing and wash before re-use. If irritation occurs seek medical advice.

Inhaled: Move person to fresh air and keep at rest until recovered. If any signs or symptoms occur or persist, get medical attention.

ADVICE TO DOCTOR

No specific antidote exists. Treat symptomatically.

PRECAUTIONS FOR USE

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

EXPOSURE STANDARDS

	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Glyphosate trimesium	--	5	--	--

TWA = The time weighted average airborne concentrations over an eight-hour working day, for a five-day working week over an entire working life.
 STEL = Short Term Exposure Limit - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal 8 hour work day.
 Peak Limit - a ceiling concentration which should not be exceeded over a measurement period which should be as short as possible but not exceeding 15 minutes.

Exposure Potential - Swallowing is unlikely under normal conditions of usage. Significant skin uptake does not occur. Inhalation is a possible route of exposure. This product is diluted with water prior to use as a spray. This diluted form is less toxic by all routes of exposure.

Re-entry Period - Do not enter treated areas without protective clothing until spray has dried.

ENGINEERING CONTROLS

No special requirements. Product is used outdoors. Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. Keep containers closed when not in use.

PERSONAL PROTECTION

Avoid contact with eyes and skin. Do not inhale spray mist. Wear overalls, safety glasses and impervious gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, goggles, respirator or face piece and contaminated clothing. Only use protective equipment bearing the mark of the Standards Association of Australia.

FLAMMABILITY

This product is NON-FLAMMABLE and non-combustible.

SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT

Store in tightly sealed original containers in a dry secure place away from fertilisers, seed, feed and food. Store out of direct sunlight. Keep out of reach of children, unauthorised persons and animals.

SPILLS AND DISPOSAL

In case of spillage it is important to take all steps necessary to:

- Avoid eye and skin contact.
- Avoid contamination of waterways.

Procedure for spill:

- (1) Keep all bystanders away.
- (2) Wear full length clothing and PVC gloves.
- (3) Re-position 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.
 - 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.

Dispose of empty, used containers by:

- (a) Triple rinsing or preferably pressure rinsing containers with water. Add the rinsings to the spray tank. DO NOT dispose of undiluted chemicals on site.
- (b) If recycling, replace cap and return clean containers to recycler or designated collection point.
- (c) 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.

Returnable containers:

- (a) Empty contents fully into application equipment.
- (b) Close all valves and return to Syngenta Crop Protection, Pendle Hill, Sydney for re-use.

FIRE/EXPLOSION HAZARD

This product is a non-combustible liquid, however, following evaporation of aqueous component residual material may burn. Extinguish warehouse and factory fires using fine water-spray, foam, carbon dioxide or dry chemical powder. During a fire this product may release toxic fumes including those of ammonia, oxides of carbon, nitrogen, phosphorous and sulphur. When fighting a major fire wear SCBA and structural firefighters uniform. Do not allow fire-water to enter drains.

OTHER INFORMATION

The active ingredient, Glyphosate trimesium, has a low potential to bioaccumulate and there is evidence of degradation in soil.

Toxicity to fish is low - rainbow trout LC_{50} (96 h) = 1053 mg/L, bluegill sunfish LC_{50} (96 hr) > 3500 mg/L. Glyphosate trimesium is harmful to aquatic invertebrates and algae. Water flea, *Daphnia magna*, LC_{50} (48 h) = 12 mg/L, green algae LC_{50} (48 h) = 11 mg/L.

Low toxicity to birds - bobwhite quail oral LD_{50} > 2050 mg/kg, mallard duck LD_{50} = 950 mg/kg.

Low toxicity to bees – contact LD_{50} = 0.39 mg/kg. Low toxicity to earthworms.

Note: This product is a registered agricultural chemical and must therefore be used in accordance with the container label directions. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the Federal health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

CONTACT POINT: Regulatory Affairs Manager - Crop Protection - (02) 9688 0444
24 HOURS EMERGENCY CONTACT: 1 800 033 111

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 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.

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Acknowledgments:

Collated by HerbiGuide. Phone 08 98444064 for more information.