

SAFETY DATA SHEET

Section 1: IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

Product Name:	TOUCHDOWN IQ
Design Code:	A13013A and A13013M
Recommended Use:	For the control of a wide range of annual and perennial grass and broadleaf weeds in Agriculture, Horticulture, Forestry, Industrial areas, Recreational areas and for other uses including general weed control.
Company Details:	Syngenta Crop Protection Limited
Address:	Tower II, Level 7, 110 Symonds Street Private Bag 92618, Symonds Street AUCKLAND NEW ZEALAND
Telephone number:	(weekdays) 09 - 306 1500
Emergency Telephone number:	(24 Hours) 0800 734 607
National Poisons & Hazchem Information Centre :	0800 POISON (0800 764 766)
Date of Preparation:	22 April, 2005

Section 2: HAZARDS IDENTIFICATION

Hazard classification:	6.5B, 9.1D
Priority Identifier:	WARNING KEEP OUT OF REACH OF CHILDREN
Secondary Identifiers:	6.5B = May cause sensitisation from prolonged skin contact. 9.1D = Harmful to aquatic organisms.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Pure Substance:		
Chemical Identity of pure substance:	N-(phosphonomethyl)glycine	
Common Name:	Glyphosate	
Synonyms:	-	
CAS number:	1071-83-6	

Mixture:		
Chemical Identity of ingredients:		
Ingredient	CAS no.	Content (% w/v)
Glyphosate (technical grade) as a potassium based formulation	1071-83-6	50
Polyoxyethylene (5) cocoamine	61791-14-8	<10
other ingredients determined not to be hazardous	-	to 100%

Section 4: FIRST AID MEASURES

Necessary First Aid measures:	<p>For advice contact the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if the victim is not breathing. Use mouth to nose rather than mouth to mouth. Obtain medical attention.</p> <p>Swallowed: If swallowed DO NOT induce vomiting.</p> <p>Eye: If concentrate or spray solution enters the eyes wash it out immediately with water. Remove contact lenses.</p> <p>Skin: If skin contact occurs remove contaminated clothing and wash affected areas thoroughly with running water.</p> <p>Inhaled: If inhaled move the victim to fresh air immediately</p>
Poisoning symptoms:	<p>No case of human poisoning due to this product is on record. The poisoning symptoms observed for laboratory mammals were non-specific.</p>
Workplace facilities:	<p>No specific facilities required. Standard emergency equipment must be available.</p>
Hygiene Practices:	<p>Avoid contact with skin and eyes and inhalation of concentrate or spray mist. When mixing or applying, wear protective clothing, including face shield, impervious gloves and footwear. If clothing becomes contaminated with product, remove clothing immediately. DO NOT eat, drink or smoke while using. Wash hands and exposed skin thoroughly with soap and water before meals and after work. Wash protective clothing daily after work.</p>
Notes for Medical Personnel:	<p>No specific antidote is available. If poisoning is suspected apply symptomatic therapy.</p>

Section 5: FIRE-FIGHTING MEASURES

Type of Hazard:	<p>This product is not flammable.</p>
Fire Hazard Properties:	<p>Combustion products are toxic and or irritant. Measures have to be taken to prevent the contaminated extinguishing agent from seeping into the ground or from spreading uncontrollably.</p>
Regulatory Requirements:	<p>not required</p>
Extinguishing Media and methods:	<p>Extinguish warehouse and factory fires using dry chemical extinguisher, foam, carbon dioxide or fine-water spray. DO NOT use direct jet of water.</p>
Hazchem Code:	<p>2X</p>
Recommended Protective Clothing:	<p>When fighting a major fire wear an air-supplied respirator. Wear protective equipment.</p>

Section 6: ACCIDENTIAL RELEASE MEASURES

Personal Precautions:	<p>Emergency Procedures: Ensure suitable personal protection during removal of spillages. This means wearing eye protection, chemically resistant gloves, boots and overalls.</p>
Environmental Precautions:	<p>Washings must be prevented from entering surface water drains or waterways.</p>
Procedure for spill:	<ol style="list-style-type: none"> (1) Keep all bystanders away. (2) Wear goggles, half face-piece respirator with combined dust and vapour cartridge, 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) Decontaminate the spill area with detergent and water and rinse with the smallest volume of water practicable.
Procedure for Disposal:	<p>Disposal of the absorbed material will depend upon the extent of the spill. Contaminated material must be disposed of in accordance with all local authority requirements. It is suggested:</p> <ul style="list-style-type: none"> • For quantities up to 50 litres of product bury in a secure approved landfill site. • For quantities greater than 50 litres seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established.

Section 7: HANDLING AND STORAGE

Precautions for safe handling:	<p>Handling: No special technical protective measures required. No special handling advice required.</p>
Regulatory Requirements:	<p>Not applicable</p>
Handling practices:	<p>Avoid contact with skin and eyes and inhalation of concentrate or spray mist. When using, do not eat, drink or smoke. Wash face and hands before eating, drinking or smoking.</p>
Approved Handlers:	<p>Approved Handlers not required.</p>
Conditions for Safe Storage:	<p>Storage: Keep out of reach of children. Keep in original containers and tightly closed. Keep away from food, drink and animal feeding stuffs. Store in a cool, dry, well ventilated place and protect from sunlight.</p>
Store Site Requirements:	<p>Signage will be required at sites holding 10000 litres or more and secondary containment at sites holding 1000 litres or more of any product classified as 9.1D (eg TOUCHDOWN IQ).</p>
Packaging:	<p>Store in original container, tightly closed, away from foodstuffs.</p>

Section 8: EXPOSURE CONTROL / PERSONAL PROTECTION

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

Workplace Exposure Guidelines:	
Workplace Exposure Standards:	Not required
Application in the workplace:	Not required
Exposure standards outside the workplace:	Glyphosate: EEL water 0.37mg/L
Engineering controls:	<p>No special requirements. Product is used outdoors. Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne mists or vapors are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.</p> <p>Follow precaution statements on the label and the use and safety directions in Code of Practice for the Management of agrichemical NZS8409.</p>
Personal Protection:	Use only protective equipment bearing the mark of the Standards Association with Australia/ New Zealand. In case of heavy exposure, wear half face-piece respirator with combined dust and vapour cartridge, chemical resistant gloves and heavy duty cotton overalls.
General Hygiene:	Change work clothes daily. May irritate the eyes and skin. Avoid contact with eyes and skin. Do not inhale spray mist. If product gets on skin immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	light brown liquid
Odour:	sugary
Flashpoint:	Does not flash
Explosive properties:	not explosive
Specific gravity:	1.348-1.357 at 20°C
Water solubility:	Soluble in / with water
pH value	4.7
Oxidising properties:	not oxidising

Section 10: STABILITY AND REACTIVITY

Stability of the Substance:	Stable under standard conditions.
Conditions to Avoid:	None known
Material to Avoid:	none known
Hazardous decomposition products	none known
Hazardous polymerisation	not known
Specific Data	not applicable

Section 11: TOXICOLOGICAL INFORMATION

HSNO Classifications:

6.5B = May cause sensitisation from prolonged skin contact.

Acute Effects (Undiluted product)

Swallowed:	LD ₅₀	>5000 mg/kg (rat)
Dermal absorption:	LD ₅₀	>5000 mg/kg (rat)
Inhaled:	LC ₅₀ (4 h)	>5.08 mg/m ³ (rat)
<u>Irritation</u>		
Eye:	NON-IRRITANT (HSNO Classification)	
Skin:	NON-IRRITANT (rabbit)	
<u>Sensitization</u>	SENSITISER (HSNO Classification)	

Chronic / Long Term Effects (Active Ingredient)

Glyphosate technical has been extensively tested on laboratory mammals and in test-tube systems. No evidence of neurotoxic, mutagenic, teratogenic or reproductive effects was obtained. No carcinogenic potential was noticed in rats.

Section 12: ENVIRONMENTAL INFORMATION

HSNO Classifications:

9.1D = Harmful to aquatic organisms.

Environmental Risk and Safety Phrases:	Avoid contamination of any water supply with chemical or empty container
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The information presented below is for the active ingredient, glyphosate acid. A thorough review of environmental information is not possible in this document.

Ecotoxicity Effects

Toxicity to Birds:	LD ₅₀ = >3851 mg/kg (bobwhite quail)
Acute toxicity to fish:	LC ₅₀ (96 h) = 24 mg/L (Rainbow trout) LC ₅₀ (96 h) = 24 mg/L (Mirror carp)
Growth inhibition, Algae:	ErC ₅₀ (72 h) = 1.55 mg/L (green algae)
Toxicity to aquatic Invertebrates:	LC ₅₀ (48h) = 5.3 mg/L (Daphnia magna (water flea))
Toxicity to soil dwelling organisms:	LC ₅₀ (28 d) >5000 mg/kg soil (earthworms).
Toxicity to Bees:	LD ₅₀ (48 h, oral and contact) = >100 µg/bee

Environmental Fate

The information presented here is for the active ingredient, glyphosate acid
The substance is soluble in water. The substance has low mobility in soil. There is evidence of photodegradation in water (acid pH). The substance is substantially biodegradable in soil (aerobic conditions).
In soil (field), DT₅₀ 1-130 days, depending on edaphic and climatic conditions. In water, DT₅₀ varies from a few to 91 days. Photodegradation in water occurs under natural conditions. DT₅₀ 33-77 days; no substantial photodegradation in soil was recorded over 31 days. In a lab whole system with water and sediment, DT₅₀ 27-146 days (aerobic), 14-22 days (anaerobic). The major metabolite in soil and water is aminomethylphosphonic acid. .
K_{ow} logP = <-3.2 (pH 2-5 20°C)

Section 13: DISPOSAL CONSIDERATIONS

Product Disposal:	Dispose of this product only by using according to the label, or at an approved landfill or other approved facility.
Container Disposal:	Ensure the container is empty. Triple rinse the container and add the residue to the spray tank. If recycling, replace cap and return clean containers to recycler or designated collection point. Alternatively, if allowed under local Territorial Authority District Plans, burn if circumstances, especially wind direction permit, otherwise crush and bury in an approved local authority facility. DO NOT reuse this container for any other purpose.

Section 14: TRANSPORT INFORMATION

Rail / Road (RID/ADR)	UN-No: 3082 Class: 9 Packaging Group: III Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Glyphosate solution)
Sea (IMDG-Code)	UN-No: 3082 Class: 9 Packaging Group: III Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Glyphosate solution) MARINE POLLUTANT: yes
Air (ICAO/IATA)	UN-No: 3082 Class: 9 Packaging Group: III Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Glyphosate solution)

Section 15: REGULATORY INFORMATION

HSNO Approval Number:	HSR000016
HSNO Controls (inc. Tracking and Record Keeping):	See http://www.ermanz.govt.nz/search/registers.html for controls.
ACVM Registration:	P 7026
ACVM Controls:	See www.nzfsa.govt.nz/acvm for registration conditions.

Section 16: OTHER INFORMATION

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 Government health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

CONTACT POINT: Business Manager - Crop Protection: (09) 306 1503
24 HOURS EMERGENCY CONTACT: 0800 734 607

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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