

SAFETY DATA SHEET

Section 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	REGLONE® Non-Residual Herbicide
Other Names:	Proper shipping name: Corrosive Liquid Toxic, N.O.S. (Diquat Dibromide) Product code: A1412P
Recommended Use:	Herbicide for the control of a wide range of grasses and broadleaf weeds
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:	Classified as a hazardous chemical according to the Australian criteria for the classification of chemicals
Risk Phrases:	R26 Very toxic by inhalation R48/25 Toxic: danger of serious damage to health by prolonged exposure if swallowed R36/37/38 Irritating to eyes, respiratory system and skin R43 May cause sensitisation by skin contact
Safety Phrases:	—

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE		
Chemical Identity of Pure Substance:	Diquat dibromide	
Synonym:	PP901	
CAS Number:	85-00-7	

MIXTURE		
Chemical Identity of Ingredients	CAS No	Proportion (%w/v)
Diquat dibromide	85-00-7	20
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 get to a doctor or hospital quickly. Phone 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, seek medical advice immediately. DO NOT induce vomiting.</p> <p>Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.</p> <p>Skin contact: Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If symptoms persist, call a physician. Wash contaminated clothing before re-use.</p> <p>Inhalation: Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poisons Information Centre immediately.</p>
<p>Poisoning Symptoms:</p> <p>Medical Advice:</p>	<p>Inflammation of the mouth, throat and oesophagus, gastrointestinal discomfort, diarrhoea</p> <p>Administer either activated charcoal (100g for adults or 2g/kg body weight in children) or Fuller's Earth (15% solution; 1 litre for adults or 15ml/kg body weight in children). NOTE: The use of gastric lavage without administration of an adsorbent has not shown any clinical benefit.</p> <p>Eye contact:- Severe damage may be caused by apparently trivial contact and healing may be delayed. Medical supervision should continue until complete healing has occurred.</p>

Section 5: FIRE FIGHTING MEASURES

<p>Suitable Extinguishing Media:</p>	<p><i>Small fires</i> Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Do not use a solid water stream as it may scatter and spread fire.</p> <p><i>Large fires</i> Use alcohol-resistant foam. Do not use a solid water stream as it may scatter and spread fire.</p>
<p>Hazards from Combustion Products:</p>	<p>As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see Section 10). Exposure to decomposition products may be a hazard to health.</p> <p>DO NOT allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.</p>
<p>Special Protective Precautions and Equipment for Fire Fighters:</p>	<p>In the event of fire, wear full protective clothing and self-contained breathing apparatus</p>
<p>Hazchem Code:</p>	<p>2X</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
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 (eg 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 50 L of product bury in a secure landfill site • For quantities greater than 50 L 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 spill area with detergent and water and rinse with the smallest volume of water practicable

Section 7: HANDLING AND STORAGE

Precautions for Safe Handling:	<p>MANUFACTURING, PACKAGING AND TRANSPORT: Avoid skin and eye contact and the inhalation of vapour and mist. Wear overalls, face shield, elbow-length impervious gloves, splash apron and rubber boots. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.</p> <p>If inhalation risk of vapour or spray exists wear organic vapour respirator meeting the requirements of Standards Australia.</p> <p>PREPARATION AND USE OF PRODUCT: Very dangerous. Poisonous if absorbed by skin contact, inhaled or swallowed. Will irritate the eyes, nose, throat and skin. Avoid contact with eyes and skin. DO NOT inhale spray mist. When preparing spray and using the prepared spray wear:</p> <ul style="list-style-type: none"> • cotton overalls buttoned to the neck and wrist • washable hat • elbow-length PVC gloves • face shield or goggles • half-face respirator or disposable respirator <p>If clothing becomes contaminated with product or wet with spray remove clothing immediately. If product 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. After each day's use, wash gloves and face shield or goggles, respirator and if rubber wash with detergent and warm water, and contaminated clothing.</p>
Conditions for Safe Storage:	<p>Store in the closed, original container in a dry, cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. Store in a locked room or a place away from children, animals, food, feedstuffs, seed and fertilisers.</p>

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

	<i>Component</i>	<i>Exposure limit</i>	<i>Value type</i>
National Exposure Standards:	Diquat dibromide	0.5 mg/m ³	8h TWA
Syngenta Exposure Standards:	Diquat dibromide	1 mg/m ³	STEL
Biological Limit Values:	No biological limits allocated		
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 vapours are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Where necessary, seek additional occupational hygiene advice.</p> <p>Follow precautionary statements on the label.</p> <p>Keep containers closed when not in use.</p>		
Personal Protective Equipment:	<p>MANUFACTURING, PACKAGING AND TRANSPORT: Avoid skin and eye contact and the inhalation of vapour and mist. Wear overalls, face shield, elbow-length impervious gloves, splash apron and rubber boots. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.</p> <p>If inhalation risk of vapour or spray exists wear organic vapour respirator meeting the requirements of Standards Australia.</p> <p>PREPARATION AND USE OF PRODUCT: Very dangerous. Poisonous if absorbed by skin contact, inhaled or swallowed. Will irritate the eyes, nose, throat and skin. Avoid contact with eyes and skin. DO NOT inhale spray mist. When preparing spray and using the prepared spray wear:</p> <ul style="list-style-type: none"> • cotton overalls buttoned to the neck and wrist • washable hat • elbow-length PVC gloves • face shield or goggles • half-face respirator or disposable respirator <p>If clothing becomes contaminated with product or wet with spray remove clothing immediately. If product 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. After each day's use, wash gloves and face shield or goggles, respirator and if rubber wash with detergent and warm water, and contaminated clothing.</p>		

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Dark red brown viscous liquid	Boiling Point/Range:	Approx. 100°C
Odour:	Non-specific	Freezing/Melting Point:	Not available
pH:	4 – 5	Solubility:	Soluble in water
Vapour Pressure:	Not available	Specific Gravity	1.20 g/cm ³ at 20°C
Vapour Density:	Not available		

Flash Point:	Does not flash	Explosive Properties:	Not explosive
Upper and Lower Flammable (Explosive) Limits in Air:	Not applicable	Oxidising Properties:	Not oxidising
Ignition Temperature:	Not available	Combustibility:	Not combustible
		Corrosiveness:	Corrosive

Section 10: STABILITY AND REACTIVITY

Chemical Stability:	Corrosive in contact with metals
Conditions to Avoid:	Corrosive in contact with metals
Incompatible Materials:	Aluminium, Mild steel, Iron
Hazardous Decomposition Products:	Combustion or thermal decomposition will evolve toxic and irritant vapours.
Hazardous Reactions:	Corrosive in contact with metals

Section 11: TOXICOLOGICAL INFORMATION

Health Effects from Likely Routes of Exposure:		
Acute:	Oral toxicity:	HARMFUL Tests on rats indicate this product is harmful following single doses of a similar formulation. (LD ₅₀ ca. 550 mg/kg)
	Dermal toxicity:	LOW TOXICITY Tests on rats indicate this product has a low toxicity following skin contact with a similar formulation. (LD ₅₀ > 5,000 mg/kg)
	Inhalation:	TOXIC Tests on rats indicate this product is toxic due to inhalation of a similar formulation. LC ₅₀ (4h) = 0.64 mg/L air Nose bleeding and soreness of the throat may result from spray mist or dust trapped on the nasal mucosa.
	Skin irritation:	MODERATE IRRITANT
	Eye irritation:	SLIGHT IRRITANT
	Sensitisation:	NOT A SENSITISER
Chronic:	Diquat dibromide technical has been extensively tested on laboratory mammals and in test-tube systems. No evidence was obtained of mutagenic, carcinogenic, teratogenic or reproductive effects. Ocular effects (cataracts) have been reported following long term oral exposure of laboratory animals.	

Section 12: ECOLOGICAL INFORMATION

This information is based on the active ingredient, diquat dibromide.

Ecotoxicity:	<p><i>Toxicity to fish:</i> Practically non-toxic to fish <i>Oncorhynchus mykiss</i> (rainbow trout): LC₅₀ >100 mg/L, 96 h</p> <p><i>Toxicity to daphnia and other aquatic invertebrates:</i> Moderately toxic to aquatic invertebrates <i>Daphnia magna</i> (Water flea): EC₅₀ = 7 mg/L, 48 h</p> <p><i>Toxicity to algae:</i> Highly toxic to algae <i>Pseudokirchneriella subcapitata</i> (green algae): E_bC₅₀ = 66 µg/L, 96 h; E_rC₅₀ = 114 µg/L, 96 h</p>
Persistence and Degradability:	Diquat dibromide is persistent in soil and water
Mobility	Diquat dibromide is immobile in soil
Environmental Fate (Exposure):	Diquat is rapidly absorbed and deactivated by soil. There is no mobility in soil or water. There is evidence of photodegradation in water and plants.
Bioaccumulative Potential:	Diquat dibromide has low potential to bioaccumulate.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Methods and Containers:	<p>Non-returnable container: Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. For pineapples, dispose of spent dip in an approved landfill, or bury under at least 500 mm of soil in a non-crop, non-pasture area away from water sources or homes. 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.</p> <p>Returnable containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.</p>
Special Precautions for Landfill or Incineration:	Not applicable

Section 14: TRANSPORT INFORMATION

LAND TRANSPORT			
ADG			
UN Number:	1760	Packing Group:	III
UN Proper Shipping Name:	Corrosive Liquid Toxic, N.O.S. (Diquat Dibromide)	Special Precautions for User:	None allocated
Class:	8	Hazchem Code:	2X
Subsidiary Risk:	None allocated		

SEA TRANSPORT IMDG			
UN Number:	1760	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Corrosive Liquid Toxic, N.O.S. (Diquat Dibromide)	Packing Group:	III
Class:	8	Marine Pollutant:	Marine pollutant

AIR TRANSPORT IATA - DGR			
UN Number:	1760	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Corrosive Liquid Toxic, N.O.S. (Diquat Dibromide)	Packing Group:	III
Class:	8		

Section 15: REGULATORY INFORMATION

APVMA Product Number:	46534
Poisons Schedule (SUSDP):	6

Section 16: OTHER INFORMATION

Date of preparation or last revision: May 2010
Source of Data: The information provided in this SDS is sourced from Syngenta internal studies 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
<p>CONTACT POINT: Regulatory Affairs Manager, Syngenta Crop Protection Pty Limited (02) 8876 8444</p> <p>24 HOURS EMERGENCY CONTACT: 1800 033 111</p>
<p>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.</p> <p>If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.</p>

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