SAFETY DATA SHEET

Section 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	**KRISMAT® WG Herbicide**
Other Names:	**Proper shipping name:** Environmentally Hazardous Substance, Solid, N.O.S. (Ametryn) **Applicable only for marine and air transport** **Product code:** A12001A
Recommended Use:	Herbicide for use in sugarcane
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**

Hazard Classification:	Classified as a hazardous chemical according to the Australian criteria for the classification of chemicals
Risk Phrases:	R22 Harmful if swallowed. R43 May cause sensitization by skin contact
Safety Phrases:	–

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE		
Chemical Identity of Pure Substance:	Ametryn	Trifloxysulfuron sodium
Synonym:	G34162	CGA362622
CAS Number:	834-12-8	199119-58-9

MIXTURE		
Chemical Identity of Ingredients	**CAS No**	**Proportion (% w/w)**
ametryn	834-12-8	73.1
trifloxysulfuron sodium	199119-58-9	1.8
kaolin	1332-58-7	5 - 15
naphthalenesulfonic acid, dibutyl-, sodium salt	25417-20-3	2 - 8
Other ingredients determined not to be hazardous	-	to 100

Section 4: FIRST AID MEASURES

Description of Necessary First Aid Measures:	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. **Ingestion:** If swallowed, seek medical advice immediately. Do not induce vomiting. **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. **Skin contact:** Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use. **Inhalation:** Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Contact a doctor or Poisons Information Centre immediately.
Poisoning Symptoms:	Poisoning symptoms in laboratory animals were non-specific
Medical Advice:	Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	*Small fires* 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. *Large fires* Alcohol-resistant foam or water spray. Do not use a solid water stream as it may scatter and spread fire.
Hazards from Combustion Products:	As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see Section 10). Combustion or thermal decomposition will evolve toxic and irritant vapours. Exposure to decomposition products may be a hazard to health.
Special Protective Precautions and Equipment for Fire Fighters:	Wear full protective clothing and self-contained breathing apparatus. Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

Section 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	In case of spillage it is important to take all steps necessary to • Avoid eye and skin contact • Avoid contamination of waterways
Methods and Materials for Containment and Clean Up:	**Procedure for spill** (1) Keep all bystanders away (2) Wear full length clothing and PVC gloves (3) Reposition any leaking containers so as to minimise leakage (4) *For a product spill:* Sweep spilt material into a pile. *For a prepared spray spill:* Dam and absorb spill with an absorbent material (e.g. sand or soil). (5) Shovel into drums (6) Disposal of the material will depend upon the extent of the spill • For quantities up to 50 kg of product bury in a secure landfill site • For quantities greater than 50 kg 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:	Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. When opening the container, preparing spray and using the prepared spray, wear: • cotton overalls buttoned to the neck and wrist (or equivalent clothing), • a washable hat and • elbow-length PVC gloves After each day's use wash gloves and contaminated clothing.
Conditions for Safe Storage:	Store in tightly sealed original containers in a dry secure place away from fertilisers, seed, feed and food.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

	Component	*Exposure limit*	*Value type*
National Exposure Standards:	kaolin	10 mg/m^3	8h TWA
Syngenta Exposure Standards:	ametryn	3 mg/m^3	8h TWA
	trifloxysulfuron sodium	10 mg/m^3	8h TWA
Biological Limit Values:	No biological limits allocated		
Engineering Controls:	No special requirements. Product is used outdoors.		
Personal Protective Equipment:	Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. When opening the container, preparing spray and using the prepared spray, wear: • cotton overalls buttoned to the neck and wrist (or equivalent clothing), • a washable hat and • elbow-length PVC gloves After each day's use wash gloves and contaminated clothing.		

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light beige to brown granules	**Boiling Point/Range:**	Not available
Odour:	None	**Freezing/Melting Point:**	Not available
pH:	8 – 12 at 1% w/v	**Solubility:**	Not miscible in deionised water, toluene or methanol
Vapour Pressure:	Not available	**Bulk Density:**	0.45 – 0.65 g/cm^3
Vapour Density:	Not available	**Surface tension:**	42.6 mN/m at 20°C

Flash Point:	Not applicable	**Explosive Properties:**	Not explosive
Upper and Lower Flammable (Explosive) Limits in Air:	Not highly flammable	**Oxidising Properties:**	Not oxidising
		Combustibility:	Not combustible
Minimum Ignition Temperature:	410°C	**Corrosiveness:**	Not corrosive to tin plate, galvanised sheet metal, iron steel or stainless steel
Dust explosion class	Forms flammable dust clouds	**Burning number**	2 at 20°C 2 at 70°C

Section 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal conditions.
Conditions to Avoid:	None known.
Incompatible Materials:	No known incompatibilities
Hazardous Decomposition Products:	Combustion or thermal decomposition will evolve toxic and irritant vapours.
Hazardous Reactions:	None known. Hazardous polymerization does not occur.

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 undiluted product. (LD_{50} > 2,000 mg/kg, male) (LD_{50} > 1,500 - < 1,800 mg/kg, female)
	Dermal toxicity:	**LOW TOXICITY** Tests on rats indicate this product has a low toxicity following skin contact with undiluted product. (LD_{50} > 2,000 mg/kg)
	Inhalation:	**LOW TOXICITY** Tests on rats indicate this product is not harmful due to inhalation of undiluted product. LC_{50} (4h) > 2.59 mg/L air)
	Skin irritation:	**MODERATE IRRITANT**
	Eye irritation:	**NON IRRITANT**
	Sensitisation:	**SENSITISER**
Chronic:	**Ametryn technical** has been extensively tested on laboratory mammals and in test-tube systems. No evidence was obtained of mutagenic, carcinogenic, teratogenic neurotoxic or reproductive effects. **Trifloxysulfuron sodium technical** has been extensively tested on laboratory mammals and in test-tube systems. No evidence was obtained of mutagenic, carcinogenic, teratogenic neurotoxic or reproductive effects.	

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity:	*Toxicity to fish:*	**Practically non-toxic to fish** *Oncorhynchus mykiss* (rainbow trout): LC_{50} = 8.08 mg/L, 96 h
	Toxicity to daphnia and other aquatic invertebrates:	**Practically non-toxic to Daphnia** *Daphnia magna* (Water flea): EC_{50} = 11.9 mg/L, 48 h
	Toxicity to algae:	**Practically non-toxic to algae** *Pseudokirchneriella subcapitata* (green algae): E_bC_{50} = 2.7 µg/L, 72 h
Persistence and Degradability:	Ametryn is not persistent in soil. Trifloxysulfuron sodium is not persistent in water or soil.	
Mobility	Ametryn has low to medium mobility in soil. Trifloxysulfuron-sodium has high mobility in soil.	
Bioaccumulative Potential:	Ametryn does not bioaccumulate Trifloxysulfuron-sodium has low potential for bioaccumulation.	

Section 13: DISPOSAL CONSIDERATIONS

Disposal Methods and Containers:	Single rinse before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. 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.
Special Precautions for Landfill or Incineration:	Not applicable

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			
UN Number:	3077	**Subsidiary Risk:**	None allocated
UN Proper Shipping Name:	Environmentally Hazardous Substance, Solid, N.O.S. (Ametryn)	**Packing Group:**	III
Class:	9	**Marine Pollutant:**	Marine pollutant

AIR TRANSPORT IATA - DGR			
UN Number:	3077	**Subsidiary Risk:**	None allocated
UN Proper Shipping Name:	Environmentally Hazardous Substance, Solid, N.O.S. (Ametryn)	**Packing Group:**	III
Class:	9		

Section 15: REGULATORY INFORMATION

APVMA Product Number:	57834
Poisons Schedule (SUSDP):	5

Section 16: OTHER INFORMATION

Date of preparation or last revision: November 2009

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

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.