SAFETY DATA SHEET

Section 1: Identification: Product identifier and chemical identity

Product Identifier:	FUSILADE FORTE [®] 128 EC Herbicide
Other Means of Identification:	Proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (Fluazifop-P-butyl) Applicable only fo/r marine and air transport
	Product code: A12715A
Recommended Use:	Herbicide for control of a wide range of grass weeds
Details of manufacturer or importer	Syngenta Australia Pty Ltd ABN 33 002 933 717
Address:	Level 1, 2-4 Lyonpark Road MACQUARIE PARK NSW 2113 AUSTRALIA
Website:	syngenta.com.au
Phone Number:	(02) 8876 8444
Emergency Phone Number:	24 hours - 1800 033 111

Section 2: Hazards identification

Classification of the Hazardous Chemical:	Skin sensitisation – Category 1B Reproductive toxicity – Category 2	
Signal Word:	WARNING	
Hazard Statement(s):	H317 May cause an allergic skin reaction H361d Suspected of damaging the unborn child	
Precautionary Statement(s):	 P102 Keep out of reach of children P202 DO NOT handle until all safety precautions have been read and understood P280 Wear protective gloves/protective clothing P302 + P352 IF ON SKIN: Wash with plenty of soap and water P308 + P313 IF exposed or concerned: Get medical advice/attention P391 Collect spillage P501 Dispose of contents/ container to an approved waste disposal plant 	
Hazard Symbols::		

Section 3: Composition and information on ingredients

SUBSTANCE	
Chemical Identity of Pure Substance:	Fluazifop-p-butyl
Synonym:	PP55
CAS Number:	79241-46-6

MIXTURE		
Chemical Identity of Ingredients:	CAS No	Proportion (% w/v)
Fluazifop-p-butyl	79241-46-6	12.8
Oleic acid ethoxylated	9004-96-0	10-<30
Octan-1-ol	111-87-5	<10
Calcium alkyl benzene sulphonate	26264-06-2	<10
Non-hazardous ingredients		to 100

Section 4: First aid measures

Description of Necessary First Aid Measures:	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.	
	Ingestion: If swallowed, seek medical advice immediately ar this container or label. 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. immediately with plenty of water. If skin irritation call a doctor. Wash contaminated clothing before	
	Inhalation:	Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a doctor or Poisons Information Centre.
Symptoms Caused by Exposure:	Poisoning symptoms in laboratory animals were non-specific	
Medical Attention and Special Treatment:	There is no specific antidote available. Treat symptomatically.	

Section 5: Fire fighting measures

Suitable Extinguishing Equipment:	 Small fires: Use water spray, alcohol resistant foam, dry chemical or carbon dioxide Large fires: Alcohol resistant foam or water spray DO NOT use a solid water stream as it may scatter and spread fire
Specific Hazards Arising from the Chemical:	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.
Special Protective Equipment and Precautions for Fire Fighters:	Wear full protective clothing and self contained breathing apparatus. DO NOT allow runoff from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

Section 6: Accidental release measures			
Personal Precautions, Protective Equipment and Emergency Procedures:	 In case of spillage it is important to take all steps necessary to Avoid eye and skin contact Avoid contamination of waterways Wear full length clothing and PVC gloves Keep all bystanders away 		
Environmental precautions:	Prevent further leakage or spillage if safe to do so. DO NOT flush into surface water or sanitary sewer system.		
Methods and Materials for Containment and Clean Up:	 Procedure for spill Keep all bystanders away Wear full length clothing and PVC gloves Reposition any leaking containers so as to minimise further leakage Dam and absorb spill with an absorbent material (eg sand or soil) Shovel the absorbed spill into drums Disposal of the absorbed material will depend upon the extent of the spill 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 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:	 May irritate the eyes and skin. Avoid contact with eyes and skin. When preparing spray and using the product wear: elbow-length PVC gloves face shield If product or spray 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, face shield and contaminated clothing.
Conditions for Safe Storage, Including any Incompatibilities:	Store in the closed, original container in a well ventilated area, as cool as possible and away from children, animals, food, feedstuffs, seed and fertilisers. DO NOT store for prolonged periods in direct sunlight.

Section 8: Exposure controls and personal protection

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

	Component	Exposure limit	Value type
National Exposure Standards:	No exposure standard alloca	ated	
Syngenta Exposure Standards:	Fluazifop-p-butyl 0.5 mg/m ³ TWA		TWA
Biological Limit Values:	No biological limits allocated		
Engineering Controls:	No special requirements. Product is used outdoors.		
Personal Protective Equipment:	 May irritate the eyes and skin. Avoid contact with eyes and skin. When preparing spray and using the product wear: elbow-length PVC gloves face shield If product or spray 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, face shield and contaminated clothing. 		

Section 9: Physical and chemical properties

Appearance:	Dark brown liquid	Boiling Point/Range:	Not available
Odour:	Solvent	Freezing/Melting Point:	Not available
pH:	6.9 at 1% (25°C)	Solubility:	Dispersible in water
Vapour Pressure:	Not available	Specific Gravity or	0.945 g/mL at 20°C
Viscosity:	54.5 cSt at 20°C	Density:	
		1	
Flash Point:	84°C (closed cup)	Explosive Properties:	Not explosive
Upper and Lower	Not highly flammable	Oxidising Properties:	Not oxidising
Flammable (Explosive) Limits in Air:		Combustibility:	Combustible C1
Ignition Temperature:	Not available	Corrosiveness:	Not corrosive

Section 10: Stability and reactivity

Reactivity:	See Section 10.3 "Possibility of hazardous reactions"	
Chemical Stability:	The product is stable when used in normal conditions	
Possibility of Hazardous Reactions:	No hazardous reactions by normal handling and storage according to provisions	
Conditions to Avoid:	No decomposition if used as directed	
Incompatible Materials:	No substances are known which lead to the formation of hazardous substances or thermal reactions	
Hazardous Decomposition Products:	Combustion or thermal decomposition will evolve toxic and irritant vapours	

Section 11: Toxicological information

Health Effects from Likely Routes of Exposure:

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Acute	Oral toxicity:	LOW TOXICITY Tests on rats indicate this product has a low toxicity following single doses of undiluted product LD ₅₀ = 3,680 mg/kg (m), 2,451 mg/kg (f)	
	Dermal toxicity:	LOW TOXICITY Tests on rats indicate this product has a low toxicity following skin contact with undiluted product $LD_{50} = 2,000 \text{ mg/kg}$	
	Inhalation:	LOW TOXICITY Tests on rats indicate this product is not harmful due to inhalation of undiluted product LC_{50} (4 hours) = >5.24 mg/L air	
	Skin irritation:	MODERATE IRRITANT	
	Eye irritation:	SLIGHT IRRITANT	
	Sensitisation:	NOT A SENSITISER	
Chronic	Fluazifop-p-butyl 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. Embryo/foetoxic effects have been reported in rats. No adverse effects in humans are expected at levels below the occupational exposure limit and when the product is handled and used according to the label.		

Section 12: Ecological information

Ecotoxicity	Toxicity to fish:	Slightly toxic to fish
		Oncorhynchus mykiss (Rainbow Trout)
		$LC_{50} = 20 \text{ ppm}, 96 \text{ hours}$
		based on test results obtained with a similar product
	Toxicity to daphnia and other aquatic invertebrates:	Highly toxic to aquatic invertebrates Daphnia magna (Water Flea) EC ₅₀ = 20 m/L, 48 hours Based on test results obtained with a similar product
	Toxicity to algae:	Highly toxic to algae Selenastrum capricornutum (Green Algae) $E_bC_{50} = 0.23 \text{ mg/L}$, 72 hours $E_rC_{50} = 0.84 \text{ mg/L}$, 72 hours Based on test results obtained with a similar product
	Toxicity to soil dwelling organisms:	Practically non-toxic to soil dwelling organisms <i>Eisenia foetida</i> (Earthworm) LC ₅₀ = >1,000 mg/kg, 14 days
	Toxicity to bees:	Practically non-toxic to bees LC ₅₀ = >200 μg/kg
Persistence and Degradability:	Fluazifop-P-butyl is not persistent in soil or water. There is evidence of rapid hydrolysis in water and soil to the parent acid, which also rapidly degrades and is of lower intrinsic toxicity.	
Mobility in Soil:	Fluazifop-P-butyl is immobile in soil	
Bioaccumulative Potential:	Fluazifop-p-buytl does not bioaccumulate	

	Section 13: Disposal considerations
Disposal Methods:	Triple or preferably pressure rinse 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.
Special Precautions for Incineration or Landfill:	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
Transport Hazard Class:	None allocated	Hazchem or Emergency Action Code:	None allocated
Subsidiary Risk:	None allocated		

SEA TRANSPORT			
UN Number:	3082	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (fluazifop-P-butyl)	Packing Group:	III
Transport Hazard Class:	9	Environmental hazards for Transport Purposes:	Whether a marine pollutant

AIR TRANSPORT IATA - DGR			
UN Number:	3082	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	eg Environmentally Hazardous Substance, Solid, N.O.S. (common name of environmentally hazardous material)	Packing Group:	III
Transport Hazard Class:	9		

Section 15: Regulatory information		
APVMA Product Number:	58521	
Poisons Schedule (SUSMP):	S6	

Section 16: Any other relevant information

Date of preparation or last revision: November 2016

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 Australia Pty Ltd (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.

DISCLAIMER

This product complies with the specifications in its statutory registration. Implied terms and warranties are excluded. Syngenta's liability for breach of the express or any non-excludable implied warranty is limited to product replacement or purchase price refund. The purchaser must determine suitability for intended purpose and take all proper precautions in the handling, storage and use of the product including those on the label and/or safety data sheet failing which Syngenta shall have no liability.

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