

SAFETY DATA SHEET

Section 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	FUSILADE FORTE 128 EC Selective herbicide
Other Names:	Proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (Fluazifop-P-butyl). Applicable only for marine and air transport
	Product code: A12715A
Recommended Use:	Selective herbicide for control of a wide range of grass weeds
Company Details:	Syngenta Australia Pty Ltd 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:	R36/38 Irritating to eyes and skin
Safety Phrases:	-

Section 3: COMPOSITION / 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 technical grade 128 g/L (present as the butyl ester)	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
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 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 and show 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. 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. Call a doctor or Poisons Information Centre immediately.
Poisoning Symptoms:	Poisoning symptoms in laboratory animals were non-specific.
Medical Advice:	There is no specific antidote available. Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	<i>Extinguishing media - small fires</i> Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide extinguisher. DO NOT use direct jet of water. <i>Extinguishing media - large fires</i> Use alcohol-resistant foam or water spray. DO NOT use direct jet of water.
Hazards from Combustion Products:	This product contains combustible organic components that may burn and decompose during a fire producing dense black smoke containing hazardous products of combustion. 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.

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
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Methods and Materials for Containment and Clean Up:

- (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 (e.g. sand, soil, diatomaceous earth or vermiculite).
- (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 50 L of product bury in a secure landfill site.
 - For quantities greater than 50 L seek advice (use emergency contact number below) from the manufacturer 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 water

Section 7: HANDLING AND STORAGE

Precautions for Safe Handling:

Will irritate the eyes. 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:

Keep out of reach of children. Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

	Component	Exposure limit	Value type
National Exposure Standards:	No exposure standard allocated		
Syngenta Exposure Standards:	Fluazifop-p-butyl	0.5 mg/m ³	TWA
Biological Limit Values:	No biological limit allocated		
Engineering Controls:	No special requirements. Product is used outdoors.		
Personal Protective Equipment:	Will irritate the eyes. 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: in water	Dispersible
Vapour Pressure:	Not available	Specific Gravity or Density:	0.945 g/mL at 20°C
Viscosity:	54.5 cSt at 20°C		

Flash point:	84°C (closed cup)	Explosive properties:	Not explosive
Upper and Lower Flammable (Explosive) Limits in Air:	not highly flammable	Oxidising properties:	Not oxidising
Ignition Temperature:	Not available	Combustibility:	Combustible C1
		Corrosiveness:	Not corrosive

Section 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable under standard conditions.
Conditions to Avoid:	None known.
Incompatible Materials:	None known.
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:	LOW TOXICITY Tests on rats indicate this product has a low toxicity following single doses of undiluted product. (LD ₅₀ male rat = 3680 mg/kg, LD ₅₀ female rat = 2451 mg/kg)
	Dermal toxicity:	LOW TOXICITY Tests on rats indicate this product has a low toxicity following skin contact with the undiluted product. (LD ₅₀ = >2000 mg/kg)
	Inhalation:	LOW TOXICITY Tests on rats indicate this product is not harmful due to inhalation of undiluted product. (LC ₅₀ (4 h) >5.24 mg/L)
	Skin irritation:	MODERATE IRRITANT(Rabbit)
	Eye irritation:	SLIGHT IRRITANT (Rabbit)
	Sensitisation:	NOT A SKIN SENSITISER (Guinea Pig)
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/foetotoxic 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:	Slightly Toxic to Fish LC₅₀ (96 h) = 20 ppm (rainbow trout)* Highly Toxic to algae E_bC₅₀ (72 h) = 0.23 mg/L (<i>Scenedesmus subspicatus</i>) E_rC₅₀ (72 h) = 0.84 mg/L (<i>Scenedesmus subspicatus</i>)* Slightly Toxic to aquatic invertebrates EC₅₀ (48 h) = 20 mg/L (<i>Daphnia magna</i> (water flea)*) Practically non-toxic to soil dwelling organisms EC₅₀ (14 d) = >1000 mg/kg soil (<i>Eisenia foetida</i>) Practically non-toxic to bees LD50 >200 µg/bee *Based on test results obtained with a similar product
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	Fluazifop-P-butyl is immobile in soil.
Environmental Fate (Exposure):	Incorporated into organic molecules
Bioaccumulative Potential:	Fluazifop-p-butyl does not bioaccumulate

Section 13: DISPOSAL CONSIDERATIONS

Disposal Methods and Containers:	Triple or preferably pressure rinse containers before disposal. Add the rinsings to the 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 Landfill or Incineration:	Not applicable

Section 14: TRANSPORT INFORMATION

LAND TRANSPORT		Not a dangerous good in Australia	
ADG			
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:	3082	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (FLUAZIFOP-P-BUTYL)	Packing Group:	III
Class:	9	Marine Pollutant:	Marine pollutant

AIR TRANSPORT IATA-DGR			
Not a dangerous good in the meaning of air transport regulations.			
UN Number:	None allocated	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	None allocated	Packing Group:	None allocated
Class:	None allocated		

Section 15: REGULATORY INFORMATION

APVMA Product Number:	58521
Poisons Schedule (SUSDP):	6

Section 16: OTHER INFORMATION

Date of preparation or last revision: March 2013
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 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.