


SAFETY DATA SHEET

Section 1: Identification: Product identifier and chemical identity

Product Identifier:	ARCADE Herbicide
Other Means of Identification:	Proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (Prosulfocarb) Applicable only for marine and air transport Product code: A8545H
Recommended Use:	Herbicide for the control of Annual Ryegrass in Wheat and Barley
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:	<ul style="list-style-type: none">• Eye irritation – Category 2A• Skin irritation – Category 2• Skin sensitisation – Category 1A
Signal Word:	Warning
Hazard Statement(s):	H315 Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation
Precautionary Statement(s):	P102 Keep out of reach of children. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/ physician. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P331 DO NOT induce vomiting. 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:	Prosulfocarb
Synonym:	ICI 574
CAS Number:	52888-80-9

MIXTURE		
Chemical Identity of Ingredients:	CAS No	Proportion (% w/v)
Prosulfocarb	52888-80-9	80
Mixture of aromatic hydrocarbons	64742-94-5	10 - <20
Dodecylphenylsulfonate calcium salt	26264-06-2	<10
Non-hazardous ingredients	-	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 and show this container or label. DO NOT induce vomiting: contains petroleum distillates and/or aromatic solvents.</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 skin irritation persists, call a physician. Wash contaminated clothing before re-use.</p> <p>Inhalation: Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Control Centre immediately.</p>
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. DO NOT induce vomiting: contains petroleum distillates and/or aromatic solvents.

Section 5: Fire fighting measures

Suitable Extinguishing Equipment:	<p>Small fires: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.</p> <p>Large fires: Alcohol-resistant foam or water spray.</p> <p>DO NOT use a solid water stream as it may scatter and spread fire.</p>
Specific Hazards Arising from the Chemical:	<p>As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion. Combustion or thermal decomposition will evolve toxic and irritant vapours. Exposure to decomposition products may be a hazard to health.</p>
Special Protective Equipment and Precautions for Fire Fighters:	<p>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.</p>

Section 6: Accidental release measures

Personal Precautions, Protective Equipment and 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 <ul style="list-style-type: none"> • Wear full length clothing and PVC gloves • Keep all bystanders away
Environmental precautions:	<p>Prevent further leakage or spillage if safe to do so. DO NOT flush into surface water or sanitary sewer system.</p>
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>Will irritate the eyes and skin. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. Avoid contact with eyes and skin. When opening the container, preparing the product for use and using the product, wear:</p> <ul style="list-style-type: none"> • cotton overalls buttoned to the neck and wrist (or equivalent clothing), • elbow-length chemical resistant gloves • face shield or goggles <p>In addition, when opening the container and mixing and loading, wear a disposable mist face mask covering mouth and nose. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use wash gloves, face shield or goggles and contaminated clothing.</p>
Conditions for Safe Storage, Including any Incompatibilities:	<p>Store in the closed, original container in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight.</p>

Section 8: Exposure controls and personal protection

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

National Exposure Standards:	No exposure standard allocated		
	Component	Exposure limit	Value type
Syngenta Exposure Standards:	Prosulfocarb	4 mg/m ³	8 hour TWA
Supplier Exposure Standards:	Mixture of aromatic hydrocarbons	100 mg/m ³ 19 ppm	TWA TWA
Biological Limit Values:	No biological limits allocated		
Engineering Controls:	No special requirements. Product is used outdoors.		
Personal Protective Equipment:	<p>Will irritate the eyes and skin. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. Avoid contact with eyes and skin. When opening the container, preparing the product for use and using the product, wear:</p> <ul style="list-style-type: none"> • cotton overalls buttoned to the neck and wrist (or equivalent clothing), • elbow-length chemical resistant gloves • face shield or goggles <p>In addition, when opening the container and mixing and loading, wear a disposable mist face mask covering mouth and nose. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use wash gloves, face shield or goggles and contaminated clothing.</p>		

Section 9: Physical and chemical properties

Appearance:	Pale yellow to brownish yellow liquid	Boiling Point/Range:	No data available
Odour:	Aromatic	Melting Point:	No data available
pH:	9.7 at 1% w/v	Solubility:	Miscible
Viscosity, dynamic:	17.8 mPa.s at 20°C 8.74 mPa.s at 40°C	Density:	1.02 g/cm ³
Viscosity, kinematic:	8 – 9 mm ² /s	Surface Tension:	32.2 mN/m at 20.5°C

Flash Point:	73°C (Pensky-Martens closed cup)	Explosive Properties:	Not explosive
Upper and Lower Flammable (Explosive) Limits in Air:	No data available	Oxidising Properties:	Not oxidizing
Auto-Ignition Temperature:	380°C	Corrosiveness:	Not corrosive

Section 10: Stability and reactivity

Reactivity:	No dangerous reaction known under conditions of normal use.
Chemical Stability:	Stable under normal conditions.
Possibility of Hazardous Reactions:	No dangerous reaction known under conditions of normal use.
Conditions to Avoid:	No decomposition if used as directed.
Incompatible Materials:	None known
Hazardous Decomposition Products:	Combustion or thermal decomposition will evolve toxic and irritant vapours.

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 a similar formulation. LD ₅₀ > 2000 mg/kg
	Dermal toxicity:	LOW TOXICITY Tests on rabbits indicate this product has a low toxicity following skin contact with a similar formulation. LD ₅₀ > 4000 mg/kg
	Inhalation:	LOW TOXICITY Tests on rats indicate this product is not harmful due to inhalation of the active ingredient. LC ₅₀ (4h) > 4.7 mg/L air
	Skin irritation:	SLIGHT IRRITANT
	Eye irritation:	MODERATE IRRITANT
	Sensitisation:	SENSITISER

Chronic **Prosulfocarb technical** have been extensively tested on laboratory animals and in test-tube systems. No evidence of mutagenic, carcinogenic, teratogenic or reproductive effects relevant to human exposure was obtained.

Section 12: Ecological information

Ecotoxicity	The following information is based on tests conducted with a similar formulation.
	<p>Toxicity to fish: Moderately toxic to fish <i>Oncorhynchus mykiss</i> (rainbow trout): LC₅₀ = 3 mg/L, 96 h</p> <p>Toxicity to daphnia and other aquatic invertebrates: Moderately toxic to Daphnia <i>Daphnia magna</i> (Water flea): EC₅₀ = 2.2 mg/L, 48 h</p> <p>Toxicity to algae: Highly toxic to algae <i>Pseudokirchneriella subcapitata</i> (green algae): ErC₅₀ = 0.18 mg/L, 96 h</p> <p>Toxicity to soil dwelling organisms: Practically non-toxic to earthworms <i>Eisenia foetida</i> (earthworm): LC₅₀ >1000 mg/kg, 14 day</p>
Persistence and Degradability:	Prosulfocarb is persistent in water (Degradation half-life: 159 - 279 d). Prosulfocarb is not persistent in soil (Degradation half-life: 35 d).
Mobility in Soil:	Prosulfocarb has slight mobility in soil.
Bioaccumulative Potential:	Prosulfocarb bioaccumulates.

Section 13: Disposal considerations

Disposal Methods:	<p>Refillable containers Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.</p> <p>Non-refillable containers 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 deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.</p>
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 IMDG			
UN Number:	3082	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (Prosulfocarb)	Packing Group:	III
Transport Hazard Class:	9	Environmental hazards for Transport Purposes:	Marine pollutant

AIR TRANSPORT IATA - DGR			
UN Number:	3082	Subsidiary Risk:	None allocated
UN Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (Prosulfocarb)	Packing Group:	III
Transport Hazard Class:	9		

Section 15: Regulatory information

APVMA Product Number:	81708
Poisons Schedule (SUSMP):	6

Section 16: Any other relevant information

Date of preparation or last revision: September 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.