

## SAFETY DATA SHEET

### Section 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>Product Name:</b>	<b>TALON<sup>®</sup> Rodenticide Pellets</b>
<b>Other Names:</b>	<b>Product code:</b> A10976AA
<b>Recommended Use:</b>	Rodenticide
<b>Company Details:</b>	<b>Syngenta Crop Protection Pty Limited</b> ABN 33 002 933 717
<b>Address:</b>	<b>Level 1, 2-4 Lyonpark Road</b> <b>MACQUARIE PARK NSW 2113</b> <b>AUSTRALIA</b>
<b>Telephone Number:</b>	<b>(02) 8876 8444</b>
<b>Emergency Telephone Number:</b>	<b>24 hours - 1800 033 111</b>

### Section 2: HAZARDS IDENTIFICATION

<b>Hazard Classification:</b>	Not classified as a hazardous chemical according to the Australian criteria for the classification of chemicals
<b>Risk Phrases:</b>	—
<b>Safety Phrases:</b>	—

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE	
<b>Chemical Identity of Pure Substance:</b>	Brodifacoum
<b>Synonym:</b>	PP581
<b>CAS Number:</b>	56073-10-0

MIXTURE		
Chemical Identity of Ingredients	CAS No	Proportion (% w/w)
Brodifacoum	56073-10-0	0.005
Other ingredients determined not to be hazardous	-	to 100

## Section 4: FIRST AID MEASURES

<b>Description of Necessary First Aid Measures:</b>	<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. Vitamin K1 (Phytomenadione) is antidotal.</p> <p><b>Ingestion:</b>           HUMANS: Rinse mouth with water. Give plenty of water to drink. If vomiting occurs give further water. Seek medical advice.                  DOMESTIC ANIMALS: If severe signs of poisoning, immediately transport to veterinarian.                  For early signs of poisoning, transport to veterinarian.                  No signs but suspected bait consumption, induce vomiting only if ingestion is recent (less than six hours). Make up a solution of salty water (2-3 tablespoons salt in a cup of water), place in a soft drink bottle and squirt down animal's throat. Vomiting should take place in approximately 10 minutes. Seek veterinarian's advice.</p> <p><b>Eye contact:</b>       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><b>Skin contact:</b>       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><b>Inhalation:</b>           Remove to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician or Poison Information Centre immediately.</p>
<b>Poisoning Symptoms:</b>	<p>No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled and overexposure occurs are:</p> <p>MILD EXPOSURE: reduction in the clotting power of blood, detectable only by laboratory analysis.</p> <p>MODERATE EXPOSURE: symptoms include bleeding gums, increased tendency to bruise, blood in faeces and urine or excessive bleeding from minor cuts or abrasions.</p> <p>SEVERE EXPOSURE: severe gastrointestinal bleeding, massive internal bleeding resulting in shock, coma and death in very severe cases</p>

<b>Medical Advice:</b>	<p><b>NOTE TO PHYSICIANS AND VETERINARIANS:</b> Brodifacoum, the active constituent of TALON Rodenticide Pellets, is a long lasting anticoagulant chemical, which if ingested by humans, domestic animals or pets, can reduce the clotting power of the blood and haemorrhage may result. Vitamin K1 (Phytomenadione) should be administered urgently by medical, appropriate para-medical personnel or veterinarians. If administered intravenously the injection must be given slowly.</p> <p>This product contains anticoagulants with an effect similar to warfarin in that they act by interfering with the synthesis of prothrombin.</p> <p><b>HUMANS:</b> The specific measure of effect is the prothrombin time. Note: this may not become prolonged until 12-18 hours after ingestion. The specific antidote is vitamin K1 (Phytomenandione). Antidote must be administered under medical supervision. Initially, antidote should be given by injection (10-20 mg, or 0.25 mg/kg for children, by slow intravenous infusion at a rate not exceeding 1mg/minute. In severe cases the use of fresh frozen plasma may be required). Maintenance treatment is given orally (40 mg/day in divided doses for adults; up to 20 mg/day in divided doses for children). The prothrombin time and the haemoglobin should be monitored. Patients should be kept under medical supervision until the prothrombin time has been normal for 3 consecutive days. Oral treatment may need continuing for several months (20 mg/day in divided doses for adults and up to 20mg/day in divided doses for children).</p> <p><b>DOMESTIC ANIMALS EXHIBITING SIGNS OF INTOXICATION:</b></p> <ol style="list-style-type: none"><li>1. Carry out a prothrombin test. Administer parentally 2-5mg/kg of Vitamin K1. Use the smallest diameter needle feasible and avoid the intravenous route in severely haemorrhagic animals.</li><li>2. Repeat prothrombin test about four hours after injection. Provided that the prothrombin time has normalised start daily oral vitamin K1 treatment and continue for three to four weeks.</li><li>3. Carry out a prothrombin test 24-48 hours after end of treatment. Continue treatment if signs of poisoning reappear or if prothrombin time is still abnormal.</li></ol> <p><b>DOMESTIC ANIMALS SUSPECTED OF CONSUMING BAIT:</b></p> <ol style="list-style-type: none"><li>1. Test prothrombin time daily for up to three days after suspected date of ingestion.</li><li>2. Treat with Vitamin K1 if signs of poisoning appear or if prothrombin time increases.</li><li>3. Prophylactic oral Vitamin K1 treatment could be carried out.</li></ol> <p>Refer to the document "The Treatment of Anticoagulant Rodenticide Poisoning" (1998 or later edition) available at most major treatment hospitals, Poisons Information Centre or Syngenta Crop Protection Pty Ltd.</p>
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## Section 5: FIRE FIGHTING MEASURES

<b>Suitable Extinguishing Media:</b>	<i>Small fires</i> Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide extinguisher. DO NOT use direct jet of water. <i>Large fires</i> Use alcohol-resistant foam or water spray. DO NOT use direct jet of water.
<b>Hazards from Combustion Products:</b>	This product contains cracked wheat that may burn and produce white wood-fire like smoke.
<b>Special Protective Precautions and Equipment for Fire Fighters:</b>	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

<b>Emergency Procedures:</b>	In case of spillage it is important to take all steps necessary to <ul style="list-style-type: none"><li>• Avoid eye and skin contact</li><li>• Avoid contamination of waterways</li></ul>
<b>Methods and Materials for Containment and Clean Up:</b>	<b>Procedure for spill</b> <ol style="list-style-type: none"><li>(1) Keep all bystanders away</li><li>(2) Wear full length clothing and PVC gloves</li><li>(3) Reposition any leaking containers so as to minimise leakage</li><li>(4) Sweep spilt material into a pile</li><li>(5) Shovel into drums</li><li>(6) Disposal of the material will depend upon the extent of the spill<ul style="list-style-type: none"><li>• For quantities up to 50 kg of product bury in a secure landfill site</li><li>• 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</li></ul></li><li>(7) Decontaminate spill area with detergent and water and rinse with the smallest volume of water practicable</li></ol>

## Section 7: HANDLING AND STORAGE

<b>Precautions for Safe Handling:</b>	<b>MANUFACTURE, PACKAGING AND TRANSPORT:</b> Avoid skin and eye contact. Wear overalls, safety glasses and impervious gloves. Always wash hands before smoking, eating, drinking or using the toilet. <b>PREPARATION AND USE OF THE PRODUCT:</b> Poisonous if swallowed. Do not inhale dust. Do not touch bait - use scoop or measure. If on skin and after each baiting, wash thoroughly with soap and water. Wash hands after use. Only use protective equipment bearing the mark of the Standards Association of Australia.
<b>Conditions for Safe Storage:</b>	Containers which have held bait should not be used for any other purpose. Store in the closed, original container in a dry, cool, well ventilated area out of direct sunlight. Keep out of reach of children and pets.

## Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

<b>National Exposure Standards:</b>	No exposure standard allocated		
	<i>Component</i>	<i>Exposure limit</i>	<i>Value type</i>
<b>Syngenta Exposure Standards:</b>	Brodifacoum	0.002 mg/m <sup>3</sup>	8 hr TWA
<b>Biological Limit Values:</b>	No biological limits allocated		
<b>Engineering Controls:</b>	No special requirements. Product is used outdoors.		
<b>Personal Protective Equipment:</b>	<p>MANUFACTURE, PACKAGING AND TRANSPORT: Avoid skin and eye contact. Wear overalls, safety glasses and impervious gloves. Always wash hands before smoking, eating, drinking or using the toilet.</p> <p>PREPARATION AND USE OF THE PRODUCT: Poisonous if swallowed. Do not inhale dust. Do not touch bait - use scoop or measure. If on skin and after each baiting, wash thoroughly with soap and water. Wash hands after use.</p> <p>Only use protective equipment bearing the mark of the Standards Association of Australia.</p>		

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Emerald green pellets	<b>Boiling Point/Range:</b>	Not applicable
<b>Odour:</b>	No odour	<b>Freezing/Melting Point:</b>	Not available
<b>pH:</b>	Not applicable	<b>Solubility:</b>	Not soluble
<b>Vapour Pressure:</b>	Not available	<b>Specific Gravity or Density:</b>	0.6 – 0.7 g/mL
<b>Vapour Density:</b>	Not available		

<b>Flash Point:</b>	Does not flash	<b>Explosive Properties:</b>	Not explosive
<b>Upper and Lower Flammable (Explosive) Limits in Air:</b>	Not highly flammable	<b>Oxidising Properties:</b>	Not oxidising
<b>Ignition Temperature:</b>	Not available	<b>Combustibility:</b>	Combustible
		<b>Corrosiveness:</b>	Not corrosive

## Section 10: STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	Stable under normal conditions
<b>Conditions to Avoid:</b>	None known
<b>Incompatible Materials:</b>	None known
<b>Hazardous Decomposition Products:</b>	Combustion or thermal decomposition will evolve toxic and irritant vapours.
<b>Hazardous Reactions:</b>	None known

## Section 11: TOXICOLOGICAL INFORMATION

Health Effects from Likely Routes of Exposure:		
<b>Acute:</b>	<b>Oral toxicity:</b>	<b>LOW TOXICITY</b> Tests on rats indicate this product has a low toxicity following single doses of active ingredient. (LD <sub>50</sub> > 5,0000 mg/kg)
	<b>Dermal toxicity:</b>	<b>LOW TOXICITY</b> Tests on rabbits indicate this product has a low toxicity following skin contact with undiluted product/. (LD <sub>50</sub> > 2,000 mg/kg)
	<b>Inhalation:</b>	<b>Inhalation is not a likely route of exposure.</b>
	<b>Skin irritation:</b>	<b>NON IRRITANT</b>
	<b>Eye irritation:</b>	<b>SLIGHT IRRITANT</b>
	<b>Sensitisation:</b>	<b>NOT A SENSITISER</b>
<b>Chronic:</b>	<b>Brodifacoum technical</b> has been extensively tested on laboratory mammals and in test-tube systems. No evidence was obtained of mutagenic, carcinogenic, teratogenic neurotoxic or reproductive effects. Excessive exposure slows blood clotting time and can cause bleeding, shock and death.	

## Section 12: ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	<i>Toxicity to fish:</i>	<b>Practically non-toxic to fish</b> <i>Oncorhynchus mykiss</i> (Rainbow trout): LC <sub>50</sub> > 1,000 mg/L, 96 h
	<i>Toxicity to daphnia and other aquatic invertebrates:</i>	<b>Practically non-toxic to aquatic invertebrates</b> <i>Daphnia magna</i> (Water flea): EC <sub>50</sub> > 1,000 mg/L, 48 h
<b>Persistence and Degradability:</b>	Brodifacoum is persistent in soil and water.	
<b>Mobility</b>	Brodifacoum has low mobility in soil.	
<b>Bioaccumulative Potential:</b>	Brodifacoum has high potential to bioaccumulate.	

## Section 13: DISPOSAL CONSIDERATIONS

<b>Disposal Methods and Containers:</b>	Dispose of empty containers and unused or untaken baits by burying in an approved dump. Look for dead rats or mice, burn or bury them, DO NOT place in refuse bins or rubbish tips. Ensure baits are removed when rodent activity has ceased.
<b>Special Precautions for Landfill or Incineration:</b>	Not applicable

## Section 14: TRANSPORT INFORMATION

<b>LAND TRANSPORT</b> Not a dangerous good in Australia ADG			
<b>UN Number:</b>	None allocated	<b>Packing Group:</b>	None allocated
<b>UN Proper Shipping Name:</b>	None allocated	<b>Special Precautions for User:</b>	None allocated
<b>Class:</b>	None allocated	<b>Hazchem Code:</b>	None allocated
<b>Subsidiary Risk:</b>	None allocated		

<b>SEA TRANSPORT</b> Not a dangerous good IMDG			
<b>UN Number:</b>	None allocated	<b>Subsidiary Risk:</b>	None allocated
<b>UN Proper Shipping Name:</b>	None allocated	<b>Packing Group:</b>	None allocated
<b>Class:</b>	None allocated	<b>Marine Pollutant:</b>	

<b>AIR TRANSPORT</b> Not a dangerous good IATA - DGR			
<b>UN Number:</b>	None allocated	<b>Subsidiary Risk:</b>	None allocated
<b>UN Proper Shipping Name:</b>	None allocated	<b>Packing Group:</b>	None allocated
<b>Class:</b>	None allocated		

## Section 15: REGULATORY INFORMATION

<b>APVMA Product Number:</b>	33896
<b>Poisons Schedule (SUSDP):</b>	6

## Section 16: OTHER INFORMATION

<b>Date of preparation or last revision:</b> May 2010
<b>Source of Data:</b> 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.
<b>Note:</b> This product is a registered agricultural chemical and must, therefore, be used in accordance with the container label directions
<b>CONTACT POINT:</b> Regulatory Affairs Manager, Syngenta Crop Protection Pty Limited (02) 8876 8444 <b>24 HOURS EMERGENCY CONTACT: 1800 033 111</b>
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.