

## SAFETY DATA SHEET

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

<b>Product Name:</b>	<b>TALON<sup>®</sup> XT PRO Rodenticide Wax Blocks</b>
<b>Other Names:</b>	<b>Product code:</b> A12720B
<b>Recommended Use:</b>	Rodenticide
<b>Company Details:</b>	<b>Syngenta Australia Pty Ltd</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
Propane-1,2-diol	57-55-6	<0.5
Triethanolamine	102-71-6	<0.1
Bitrex (bittering agent)	3734-33-6	0.01
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 Wax Blocks, 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. <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>
------------------------	---

## 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. Do not use a solid water stream as it may scatter and spread fire. <i>Large fires</i> Use alcohol-resistant foam or water spray. Do not use a solid water stream as it may scatter and spread fire.
<b>Hazards from Combustion Products:</b>	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.
<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> Do not inhale dust. Do not touch the bait, use scoop or measure. If on skin and after each baiting, wash thoroughly with soap and water. Only use protective equipment bearing the mark of the Standards Association of Australia.
---------------------------------------	--

<b>Conditions for Safe Storage:</b>	<p>Containers which have held bait should not be used for any other purpose. Store in tightly sealed original containers in a dry secure place away from fertilisers, seed, feed and food. Store out of direct sunlight. Keep out of reach of children, unauthorised persons and animals.</p> <p>Store and transport according to the requirements for a Schedule 6 poison. Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail.</p>
-------------------------------------	---

## Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

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

	<i>Component</i>	<i>Exposure limit</i>	<i>Value type</i>
<b>National Exposure Standards:</b>	propane-1,2-diol (particulates)	10 mg/m <sup>3</sup>	8h TWA
<b>Syngenta Exposure Standards:</b>	brodifacoum	0.002 mg/m <sup>3</sup>	8h TWA
<b>Biological Limit Values:</b>	No biological limits allocated		
<b>Engineering Controls:</b>	IN THE WORKPLACE: Natural ventilation should be adequate under normal conditions. Keep containers closed when not in use.		
<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: Do not inhale dust. Do not touch the bait, use scoop or measure. If on skin and after each baiting, wash thoroughly with soap and water. Only use protective equipment bearing the mark of the Standards Association of Australia.</p>		

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Blue wax blocks	<b>Boiling Point/Range:</b>	Not available
<b>Odour:</b>	Odourless	<b>Freezing/Melting Point:</b>	Not available
<b>pH:</b>	Not applicable	<b>Solubility:</b>	Not soluble in water
<b>Vapour Pressure:</b>	Not available	<b>Density:</b>	1.2 g/cm <sup>3</sup>
<b>Vapour Density:</b>	Not available		

<b>Flash Point:</b>	>61°C	<b>Explosive Properties:</b>	Not explosive
<b>Upper and Lower Flammable (Explosive) Limits in Air:</b>	Not available	<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 standard conditions.
<b>Conditions to Avoid:</b>	Not available
<b>Incompatible Materials:</b>	Not available
<b>Hazardous Decomposition Products:</b>	Combustion or thermal decomposition will evolve toxic and irritant vapours
<b>Hazardous Reactions:</b>	unknown

## Section 11: TOXICOLOGICAL INFORMATION

<b>Health Effects from Likely Routes of Exposure:</b>		
<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 undiluted product. (LD <sub>50</sub> > 5,000 mg/kg)
	<b>Dermal toxicity:</b>	<b>LOW TOXICITY</b> Tests on rats indicate this product has a low toxicity following skin contact with undiluted product. (LD <sub>50</sub> > 5,000 mg/kg)
	<b>Inhalation:</b>	Due to the form of this product (solid preparation), inhalation is not considered to be a relevant route of exposure.
	<b>Skin irritation:</b>	<b>NON IRRITANT</b>
	<b>Eye irritation:</b>	<b>NON 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> > 100 mg/L, 96 h (Derived from components)
	<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> > 100 mg/L, 48 h (Derived from components)
<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>	Break, crush, puncture and bury empty containers and dispose of unused bait in a local authority landfill. If no landfill is available, bury the containers or unused bait 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.
<b>Special Precautions for Landfill or Incineration:</b>	Not applicable

### Section 14: TRANSPORT INFORMATION

<b>LAND TRANSPORT ADG</b>	Not a dangerous good in Australia		
<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 IMDG</b>	Not a dangerous good		
<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 IATA - DGR</b>	Not a dangerous good		
<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>	59323
<b>Poisons Schedule (SUSDP):</b>	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.

<sup>®</sup> Registered trademark of a Syngenta Group Company