

## SAFETY DATA SHEET

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

|                                    |  |
|------------------------------------|--|
| <b>Product Name:</b>               | <b>TALON XT PRO Rodenticide Wax Blocks</b>   |
| <b>Other names:</b>                | <b>Proper Shipping Name:</b> Talon XT Pro Rodenticide Wax Blocks<br><b>Product code:</b> A12720B |
| <b>Recommended Use:</b>            | Rodenticide  |
| <b>Company Details:</b>            | <b>Syngenta Crop Protection Pty Ltd</b><br>ABN 33 002 933 717                                    |
| <b>Address:</b>                    | <b>Level 1, 2-4 Lyon Park Road</b><br><b>MACQUARIE PARK NSW 2113</b><br><b>AUSTRALIA</b>         |
| <b>Telephone number:</b>           | <b>(02) 8876 8444</b>  |
| <b>Emergency Telephone number:</b> | <b>24 Hours - 1800 033 111</b>   |
| <b>Poisons Information Centre:</b> | <b>131 126</b>   |

### Section 2: HAZARDS IDENTIFICATION

|                               |  |
|-------------------------------|--|
| <b>Hazard Classification:</b> | This material may cause mild irritation following eye contact, but is unlikely to cause skin irritation  |
| <b>Risk Phrases:</b>          | R27/28 – Very toxic in contact with skin and if swallowed<br>R48/24/25 – Toxic: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed |
| <b>Safety Phrases:</b>        | -  |

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

| <i>Active Ingredient:</i>                   |  |
|---|--|
| <b>Chemical Identity of pure substance:</b> | 3-[3-(4'-bromo[1,1-biphenyl]-4-yl)-1,2,3,4-tetrahydro-1-naphthaleny]-4-hydroxy-2H-1-benzopyran-2-one |
| <b>Common Name:</b>                         | Brodifacoum  |
| <b>Synonyms:</b>                            |  |
| <b>CAS number:</b>                          | 56073-10-0   |
| <b>Significant impurities:</b>              |  |

| <i>Mixture:</i>                                  |                |                        |
|--|----------------|------------------------|
| <b>Chemical Identity of ingredients:</b>         |                |                        |
| <b>Ingredient</b>                                | <b>CAS no.</b> | <b>Content (% w/v)</b> |
| <b>Brodifacoum</b>                               | 56073-10-0     | 0.005                  |
| 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><b>In case of poisoning by any exposure route get to a doctor or hospital quickly. Phone Poisons Information Centre on 131 126.</b></p> <p>Swallowed: HUMANS: Rinse mouth with water. Give plenty of water to drink. If vomiting occurs give further water. Seek medical advice.<br/>                 DOMESTIC ANIMALS: If severe signs of poisoning – immediately transport to veterinarian.<br/>                 For early signs of poisoning – transport to veterinarian.<br/>                 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>Eye: If product gets in eyes wash it out immediately with water.</p> <p>Skin: If skin contact occurs remove contaminated clothing and wash affected areas thoroughly with soap and water. Wash contaminated clothing before re-use. If irritation occurs seek medical advice.</p> <p>Inhaled: Move person to fresh air and keep at rest until recovered. If any signs or symptoms occur or persist, get medical attention.</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>Notes for Medical Personnel:</b>                 | <p>This product contains anticoagulants with an effect similar to warfarin in that they act by interfering with the synthesis of prothrombin.</p> <p>HUMANS: 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.</p> <p>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).</p> <p>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.</p> <p>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>Continued administration of Vitamin K1 for periods of several weeks with regular monitoring of the coagulation parameters is necessary. In the early phase of the poisoning, infusion of fresh-frozen plasma is advisable.</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> </ol> |

3. Prophylactic oral Vitamin K1 treatment could be carried out.

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.

## Section 5: FIRE-FIGHTING MEASURES

|   |   |
|---|---|
| <b>Type of Hazard:</b>                  | This product is combustible   |
| <b>Fire Hazard Properties:</b>          | Combustible   |
| <b>Extinguishing Media and methods:</b> | Extinguish warehouse and factory fires using fine water-spray, foam or dry agent. During a fire this product may release smoke and hazardous decomposition products. When fighting a major fire wear SCBA and structural firefighters uniform. DO NOT allow fire-water to enter drains. |
| <b>Recommended Protective Clothing:</b> | When fighting a major fire wear self-contained breathing apparatus and protective equipment.  |
| <b>Hazchem code:</b>                    | None allocated.   |

## Section 6: ACCIDENTAL RELEASE MEASURES

| <b>Emergency Procedures:</b>      |   |
|-----------------------------------|---|
| <b>Personal Precautions:</b>      | Ensure suitable personal protection during removal of spillages. This means wearing eye protection, chemically resistant gloves, boots and overalls.  |
| <b>Environmental Precautions:</b> | Washings must be prevented from entering surface water drains or waterways.   |
| <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 further leakage.</li> <li>(4) Sweep wax blocks into a pile.</li> <li>(5) Shovel the material into drums.</li> <li>(6) Decontaminate the spill area with detergent and water and rinse with water.</li> </ol>                   |
| <b>Procedure for Disposal:</b>    | <p>Disposal of the absorbed material will depend upon the extent of the spill.</p> <ul style="list-style-type: none"> <li>• For quantities up to 50 kg of product bury in a secure landfill site.</li> </ul> <p>For quantities greater than 50 kg seek advice (use emergency contact number below) from the manufacturer before attempting disposal. Contain in a secure location until disposal method is established.</p> |

## Section 7: HANDLING AND STORAGE

| <b>Handling:</b>  |  |
|---|--|
| <b>Handling Practices:</b>                                      | <p><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.</p> <p><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.</p> <p>Only use protective equipment bearing the mark of the Standards Association of Australia.</p> |
| <b>Storage:</b>   |  |
| <b>Conditions for Safe Storage and Store Site Requirements:</b> | 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.  
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.

## Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

| <b>Workplace Exposure Guidelines:</b> |  |                   |     |  |  |     |                   |                    |     |              |
|---------------------------------------|--|-------------------|-----|--|--|-----|-------------------|--------------------|-----|--------------|
| <b>National Exposure Standards:</b>   | No values have been assigned for this specific material by NOHSC.  |                   |     |  |  |     |                   |                    |     |              |
| <b>Syngenta Exposure Standards:</b>   | Supplier recommended hygiene standard: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th></th> <th colspan="2">TWA</th> </tr> <tr> <th></th> <th>ppm</th> <th>mg/m<sup>3</sup></th> </tr> </thead> <tbody> <tr> <td><b>Brodifacoum</b></td> <td>---</td> <td><b>0.002</b></td> </tr> </tbody> </table> <p>TWA = time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.</p> |                   | TWA |  |  | ppm | mg/m <sup>3</sup> | <b>Brodifacoum</b> | --- | <b>0.002</b> |
|                                       | TWA  |                   |     |  |  |     |                   |                    |     |              |
|                                       | ppm  | mg/m <sup>3</sup> |     |  |  |     |                   |                    |     |              |
| <b>Brodifacoum</b>                    | ---  | <b>0.002</b>      |     |  |  |     |                   |                    |     |              |
| <b>Biological Limit Values:</b>       | Not applicable   |                   |     |  |  |     |                   |                    |     |              |

| <b>Engineering Controls:</b>      |   |
|-----------------------------------|---|
| <b>Exposure Control Measures:</b> | IN THE WORKPLACE: Natural ventilation should be adequate under normal conditions. Keep containers closed when not in use. |

| <b>Personal Protective Equipment (PPE):</b> |  |
|---|--|
| <b>Detail Specifications for Equipment:</b> | 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.<br>PREPARATION AND USE OF THE PRODUCT: Do not inhale dust. Do not touch the bait. If on skin and after each baiting, wash thoroughly with soap and water.<br>Only use protective equipment bearing the mark of the Standards Association of Australia.  |
| <b>Specific Route of Exposure:</b>          | Swallowing and inhalation are unlikely under normal conditions of usage. Significant skin uptake does not occur.   |
| <b>General Hygiene:</b>                     | Avoid contact with skin, eyes and clothing. Avoid contact with spray mist. DO NOT inhale spray mist. When opening the container and preparing product for use, wear protective clothing, including elbow-length PVC gloves, face shield or goggles and footwear. If clothing becomes contaminated with product, remove immediately. DO NOT eat, drink or smoke while using. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. Wash protective clothing daily after work. |

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

|                         |                        |                             |                |
|-------------------------|------------------------|-----------------------------|----------------|
| <b>Appearance:</b>      | Blue wax blocks        | <b>Flash Point:</b>         | Not applicable |
| <b>Odour:</b>           | Odourless              | <b>Flammability:</b>        | Not applicable |
| <b>pH:</b>              | Not applicable         | <b>Surface tension:</b>     | n/a            |
| <b>Bulk density:</b>    | 1.15 g/cm <sup>3</sup> | <b>Solubility in water:</b> | Insoluble      |
| <b>Vapour pressure:</b> | Not available          | <b>Boiling Point:</b>       | Not available  |

|                              |                  |                        |               |
|------------------------------|------------------|------------------------|---------------|
| <b>OTHER PROPERTIES</b>      |                  | <b>Combustibility:</b> | Combustible   |
| <b>Explosive properties:</b> | Not an explosive | <b>Corrosiveness:</b>  | Not corrosive |
| <b>Oxidising properties:</b> | Not an oxidiser  |                        |               |

## Section 10: STABILITY AND REACTIVITY

|   |  |
|---|--|
| <b>Stability of the Substance:</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

### ACUTE HEALTH EFFECTS FROM LIKELY ROUTES OF EXPOSURE

|   |  |
|---|--|
| <b>Swallowing:</b>                                | <b>VERY TOXIC</b><br>Tests on rats indicate this product is VERY TOXIC following single doses of the active ingredient.<br>(LD <sub>50</sub> = 0.27 mg/kg)                         |
| <b>Skin contact:</b>                              | <b>NOT HARMFUL</b><br>Tests on rabbits indicate that the product is not harmful following a single dermal application of a similar formulation.<br>(LD <sub>50</sub> = 2000 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>Irritation</b> (based on studies with rabbits) |  |
| Eye:  | <b>SLIGHT IRRITANT</b>   |
| Skin:   | <b>NON-IRRITANT</b>  |

### CHRONIC HEALTH EFFECTS

**Brodifacoum technical** has been extensively tested in mammals and in test-tube systems. No evidence of mutagenic, carcinogenic, neurotoxic, teratogenic or reproductive effects was obtained. Studies in rats and rabbits indicate that this material accumulates in body tissues, principally the liver, and has a very long half-life (150 – 200 days in rats dosed with 0.25 mg/kg). Thus, in humans there is a potential for accumulation of small amounts over a long period of continued exposure leading to toxic levels within the body.

## Section 12: ECOLOGICAL INFORMATION

The following information is based on brodifacoum.

|   |  |
|---|--|
| <b>Low toxicity to fish</b>                     | Rainbow Trout, <i>Oncorhynchus mykiss</i> , LC <sub>50</sub> (96 h) = >1000 mg/L (calculated)                              |
| <b>Low toxicity to algae:</b>                   | <i>Selenastrum corniculatum</i> LC <sub>50</sub> (48 h) = >1000 mg/L (calculated)  |
| <b>Low toxicity to aquatic invertebrates:</b>   | Water flea <i>Daphnia magna</i> , LC <sub>50</sub> (48 h) = >1000 mg/L   |
| <b>Low toxicity to soil dwelling organisms:</b> | Earthworm LC <sub>50</sub> (48 h) = >1000 mg/L (calculated)  |
| <b>Low toxicity to bees:</b>                    | LC <sub>50</sub> (48 h) = >1000 mg/L (calculated)  |
| <b>Persistence/degradability:</b>               | Brodifacoum degrades slowly in soils under aerobic and flooded conditions. The half-life in soil is greater than 12 weeks. |
| <b>Mobility:</b>                                | It is unlikely to leach to groundwater.  |
| <b>Bioaccumulative potential:</b>               | Log POW is 8.5, risk of bioaccumulation in an aquatic species is high.   |

### Section 13: DISPOSAL CONSIDERATIONS

|                            |  |
|----------------------------|--|
| <b>Product Disposal:</b>   | Dispose of this product only by using according to the label. Do not contaminate drains, streams, rivers or waterways with the chemical or used container. Add rinsings to spray tank. |
| <b>Container Disposal:</b> | Dispose of empty container, used bait stations and spilt bait by wrapping in paper, placing in plastic bag and putting in garbage.   |

### Section 14: TRANSPORT INFORMATION

|                                 |                                   |                                      |                |
|---------------------------------|-----------------------------------|--------------------------------------|----------------|
| <b>LAND TRANSPORT</b><br>ADG    | 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</b><br>IMDG    | Not a dangerous good |                                      |                |
| <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>AIR TRANSPORT</b><br>IATA-DGR | Not a dangerous good |                                      |                |
| <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       |                                      |                |

### Section 15: REGULATORY INFORMATION

|                                  |       |
|----------------------------------|-------|
| <b>APVMA Approval Number:</b>    | 59323 |
| <b>Poisons Schedule (SUSDP):</b> | 6     |

## Section 16: OTHER INFORMATION

**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 Crop Protection - (02) 9688 0444  
**24 HOURS EMERGENCY CONTACT: 1 800 033 111**

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.

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