

**Trade Advice Notice  
on**

**Spinosad**

**in the product**

**Conserve Grain Protector  
(APVMA Product Number 59914)**

**30 May 2006**

**Australian Pesticides and Veterinary Medicines Authority  
(APVMA)**

**For further information contact:**

**Wendy Cooper  
Evaluator - Insecticides  
Pesticides Program**

**Ph: 02 6272 3081**

**Fax: 02 6272 3218**

**[wendy.cooper@apvma.gov.au](mailto:wendy.cooper@apvma.gov.au)**

## Trade Advice Note on the Product

### Conserve Grain Protector (120 g/L spinosad)

#### Introduction

The Australian Pesticides and Veterinary Medicines Authority (APVMA) has before it an application from Dow AgroSciences Australia Limited, to register the new product *Conserve Grain Protector* for the post-harvest control of the lesser grain borer in stored cereal grains. The product is a suspension concentrate containing 120 g/L of spinosad. The application requires the establishment of new maximum residue limits (MRLs) for cereal grains and rice hulls, and also for animal commodities. A MRL of 1 mg/kg for cereal grain is recommended in relation to this application.

The APVMA invites any person to submit a relevant written submission with respect to whether the proposed new use is likely to unduly prejudice trade or commerce between Australia and Australia's trading partners. Please provide your submission by 27 June 2006. Any submissions provided after this date may be unable to be considered before the regulatory decision is made. All submissions should be addressed to the above contact.

#### Trade consideration

##### 1. Commodities exported

Commodities exported in relation to the proposed use are sorghum, oats, rice and wheat, as well as beef, sheep, pig and poultry meat commodities.

##### 2. Destination and Value of Exports

The total exports of Australian coarse grains (sorghum, oats, barley, maize and triticale) in 2003/04 were 5,769 kt, valued at \$1.34 bn, total exports of wheat 17,987 kt, valued at \$4.069 bn, and rice exports were 690 kt valued at \$0.082 bn.

The largest export markets for Australian cereal grains by value are shown below (Australian Commodity Statistics 2004).

| Grain   | Main destinations                                     |
|---------|---|
| Sorghum | Japan   |
| Oats    | Japan, UAE, Philippines                               |
| Rice    | Statistics not available                              |
| Wheat   | Egypt, Indonesia, Japan, Korea, Iraq, China, Malaysia |

Australia also exports significant quantities of beef (\$3.8 bn), sheep (\$1.3 bn), pig (\$0.18 bn) and poultry (\$0.02 bn) meats to Japan, Korea and the USA. Live cattle exports to Asia and the Middle East, and live sheep exports to the Middle East also make up a significant proportion of Australia's exports.

Australia also exports \$2.16 bn of dairy products, with the main markets being Japan, Saudi Arabia and the Philippines.

### 3. Proposed use pattern

#### *Conserve Grain Protector (120 g/L spinosad)*

| Crop                        | Pest  | Rate  | Critical Comments  |
|-----------------------------|---|---|--|
| Cereal grains, post-harvest | Lesser grain borer, ( <i>Rhyzopertha dominica</i> ) | 400 mL in 50L water, for up to 9 months' protection | Apply at the rate of 1 L diluted spray per tonne of grain (0.96 g ai/tonne). |

Restrains:

DO NOT move treated grain within 24 hours after treatment

Withholding periods:

NOT REQUIRED when used as directed

Trade advice information:

***Grain for human consumption:*** Users should note that suitable MRLs or import tolerances for cereals treated with Conserve Grain Protector may not have been established in all markets. Before treating for export, please check with your exporter for the latest information on MRLs and import tolerances.

***Grain for Animal Feed:*** Feeding of Conserve-treated grain to livestock could result in residues in meat and meat products that may exceed allowed levels in some export markets. Please check with your exporter for the latest information on MRLs and import tolerances for animal products.

### 4. Results from trials presented to the APVMA

Spinosad residues in stored grain (wheat, oats, sorghum, barley and rice) persisted unchanged for the test period (up to 11 months), with little decline in magnitude. The data supported MRLs of 1 mg/kg in stored grains and 4 mg/kg in rice hulls. A withholding period is not required when used as directed.

When fed to beef and dairy cattle at 1 ppm, residues were highest and most persistent in fat tissue. Body fat residues declined with a half-life of 14 days. Similarly, when spinosad at 1 ppm was fed to poultry, residues were highest in fat tissues. No decline data were available for spinosad residues in poultry.

### 5. Overseas Registration & Use Pattern

Spinosad products are currently registered for use on stored grains in the USA with the same use pattern as proposed for Australia. As a result there is a tolerance established for stored cereal grains and processed fractions in the USA. In addition, an import MRL has been set for spinosad on cereal grains in the UK, which should result in a TMRL being set for the EU in late 2006.

## 6. Codex Alimentarius Commission and overseas MRLs

The following table gives a comparison of relevant international MRLs:

| Commodity                             | Tolerance/MRL, (mg/kg) |      |                    |                    |                  |
|---------------------------------------|------------------------|------|--------------------|--------------------|------------------|
|                                       | Codex                  | USA  | Japan <sup>①</sup> | Korea <sup>②</sup> | UK (import)      |
| Cereal grain                          | 1                      | 1.5  | 0.02               | -                  | 1 <sup>③</sup>   |
| Wheat bran                            | 2                      | 1.5  | 2                  | -                  | 2 <sup>③</sup>   |
| Edible offal (mammalian) <sup>④</sup> | 1 (K), 2 (L)           | 8    | 4                  | -                  | 0.1 (K), 0.2 (L) |
| Meat, mammalian (in the fat)          | 3                      | 33   | 20                 | -                  | 1                |
| Milks                                 | 1                      | 6    | 3                  | -                  | 0.05             |
| Poultry, edible offal of              | -                      | 0.03 | 0.04               | -                  | -                |
| Poultry meat                          | -                      | 0.02 | 0.02               | -                  | 0.1              |
| Poultry skin/fat                      | 0.2                    | 0.5  | 0.4                | -                  | -                |
| Eggs                                  | 0.01                   | 0.05 | 0.05               | -                  | 0.01             |

Notes: ① Japanese provisional listing

② No relevant MRLs listed

③ Current MRL only: An import MRL of 1.5 mg/kg for cereal grains and 2 mg/kg for wheat bran is expected by 4th quarter, 2006.

④ K = kidney; L = liver.

## 7. Current and proposed Australian MRLs for spinosad (relevant to this application)

**Table 1**

| Compound | Food    | MRL (mg/kg)                   |          |       |
|----------|---------|-------------------------------|----------|-------|
|          |         | Present                       | Proposed |       |
| Spinosad | GC 0080 | Cereal grains                 | T1       | 1     |
|          | MO 0105 | Edible offal (mammalian)      | T0.2     | 0.2   |
|          | PE 0112 | Eggs                          | T0.05    | 0.05  |
|          | MM 0095 | Meat (mammalian) [in the fat] | T1       | 1     |
|          | ML 0106 | Milks                         | T0.1     | 0.1   |
|          | PO 0111 | Poultry, edible offal of      | T0.05    | 0.05  |
|          |         | Poultry fat/skin              | T0.2     | 0.2   |
|          | PM 0110 | Poultry meat                  | *0.01    | *0.01 |
|          |         | Wheat bran, unprocessed       | -        | 2     |

\* = MRL set at the limit of quantitation

**Table 4**

| Compound | Animal feed commodity | MRL (mg/kg) |          |
|----------|-----------------------|-------------|----------|
|          |                       | Present     | Proposed |
| Spinosad |                       |             |          |
|          | Rice hulls            | -           | 4        |

For full details of spinosad MRLs, please refer to the APVMA website <http://www.apvma.gov.au> and follow the Residues link.

## **8. Potential Risk to Trade**

Export of treated produce containing finite (measurable) residues of spinosad may pose a risk to Australian trade in situations where (i) no residue tolerance (import tolerance) is established in the importing country or (ii) where residues in Australian produce are likely to exceed a residue tolerance (import tolerance) established in the importing country.

The proposed Australian MRLs for all commodities compare favourably with Codex MRLs (CXLs) and the USA tolerances, except for eggs, and for post-harvest treated grain in Japan.

Annual egg product exports in 2003/04 amounted to \$2.664 m, with the main market for whole egg product being Asia and the Middle East. There is unlikely to be any impact of the presence of spinosad residues in eggs on the export of egg product. It is possible that, through the manipulation of the proportion of treated grain included in the diet, no residue issues should arise.

As far as treated grain is concerned, the Japanese will likely adopt the CXL for post-harvest grain, and so there will be no issue in exported grain. Most other identified markets recognise CXLs and so the risk to trade is minimal.

There appears to be little overall risk to export trade in animal meat commodities as Australia's MRLs are well below both Codex and those of its trading partners. However, there could be a potential risk in Europe until the current TMRL for the UK is converted to a harmonised EU TMRL under Regulation (EC) No. 396/2005, which is expected to occur by October 2006. There is also little risk in trade of dairy products, as the proposed Australian MRL for milks is well below the MRLs/ tolerances for Codex and the USA and Japan.

The APVMA requires advice from the relevant industries on the perceived level of risk and whether any industry-initiated strategies are required to manage the risk. APVMA considers that no withdrawal period onto clean feed is required for animals exposed to spinosad residues in their diets resulting from the use of *Conserve Grain Protector*.

## **9. Conclusions**

The APVMA concludes from the information available that use of the product in accordance with the label directions is unlikely to pose any undue risk to Australian trade as proposed Australian MRLs compare favourably with Codex and the USA CXLs/ tolerances, except for eggs, and for post-harvest treated grain in Japan. However, it is considered that there is unlikely to be any impact on Australia's trade in eggs, and adoption by Japan of the Codex MRL or the promulgation of an import MRL for post-harvest-treated grain is expected to alleviate any risk to grain trade. Relevant industries are requested to comment on the likely risk resulting from the lack of MRLs in the EU.