MATERIAL SAFETY DATA SHEET

STATEMENT OF HAZARDOUS NATURE:
Not classified as hazardous according to the criteria of NOHSC

COMPANY DETAILS:
Syngenta Crop Protection Pty Limited
ABN 33 002 933 717
140-150 Bungaree Rd.,
PENDLE HILL, NSW, 2145

IDENTIFICATION

PRODUCT NAME: MAXIM® 100 FS Fungicide Seed Treatment
Formulation type: suspension concentrate
Active Ingredients: fludioxonil
Product Code No.: A-8348 B
Chemical types: phenyl pyrrole
UN Number (ADG): none allocated

USE: Seed piece treatment for the control of seed borne Rhizoctonia (Black scurf) and Silver scurf (Helminthosporium solani) in potatoes.

PHYSICAL DESCRIPTION/PROPERTIES
Appearance: Light red to dark red liquid
Odour: Weak, like varnish
Vapour pressure (fludioxonil): Henry’s law constant (25°C): 5.4 x 10^{-5} Pa.m^3/mol

OTHER PROPERTIES
Specific gravity: 1.02 - 1.08 (20°C)
Surface tension: 42.7 - 43.4 mN/m (filtrates of 0.1 g/L suspensions)
Explosive properties: Not explosive.
Corrosiveness: Non-corrosive

INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No.</th>
<th>Content (%w/v)</th>
</tr>
</thead>
<tbody>
<tr>
<td>fludioxonil (technical grade)</td>
<td>[57837-19-1]</td>
<td>10</td>
</tr>
<tr>
<td>to give fludioxonil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>polyarylphenolphosphate ethoxylate</td>
<td>&lt;10</td>
<td></td>
</tr>
<tr>
<td>tristyrylphenol, 16 moles ethylene oxide</td>
<td>&lt;10</td>
<td></td>
</tr>
<tr>
<td>formaldehyde</td>
<td>[50-00-0]</td>
<td>&lt;1</td>
</tr>
<tr>
<td>other ingredients determined not to be hazardous</td>
<td></td>
<td>to 100</td>
</tr>
</tbody>
</table>

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

ACUTE
Toxicity - This product is unlikely to present a toxicity hazard during normal use (WHO Hazard Class III)
Swallowed: LOW TOXICITY
Tests on rats using a similar formulation containing identical ingredients indicate a low toxicity following single doses of undiluted product.
(LD_{50} > 3000 mg/kg)
Dermal absorption: **LOW TOXICITY**

Tests on rats using a similar formulation containing identical ingredients indicate a low toxicity due to dermal contact with undiluted product.

\( \text{LD}_{50} >4000 \text{ mg/kg} \)

**Inhaled:** **LOW TOXICITY**

Tests on rats using a similar formulation containing identical ingredients indicate a low toxicity due to inhalation of undiluted product.

\( \text{LC}_{50} (4 \text{ h}) >3.1 \text{ mg/L, highest attainable concentration} \)

**Irritation** (based on studies with rabbits using undiluted product):

Eye: **SLIGHT IRRITANT**

Skin: **NON IRRITANT**

**Sensitisation**

Skin: **NOT A SENSITISER**

**Poisoning symptoms:**

No case of human poisoning due to this product is on record. The poisoning symptoms observed for laboratory mammals were non-specific and transient only. The same can be expected for humans.

**CHRONIC (Active Ingredients)**

Fludioxonil technical has been extensively tested on laboratory mammals and in test-tube systems. No evidence of mutagenic, carcinogenic, teratogenic or reproductive effects was obtained.

**FIRST AID**

In case of poisoning by any exposure route contact a doctor or Poisons Information Centre. Phone 131 126.

- **Swallowed:** If swallowed, seek medical advice immediately and show container or label.
- **Eye:** Flush with large quantities of clean tap water for at least 15 minutes.
- **Skin:** Remove contaminated clothing and wash affected areas thoroughly with soap and water.
- **Inhaled:** Move affected person to fresh air and keep at rest until recovered.

**ADVICE TO DOCTOR**

No specific antidote exists. Treat symptomatically. Since excretion of fludioxonil via the bile is significant, the application of medical charcoal in a large quantity of water and a laxative may be indicated even in cases when considerable time has elapsed since ingestion.

**PRECAUTIONS FOR USE**

**EXPOSURE STANDARDS**

The following exposure standards have been set for formaldehyde:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Time-weighted average (TWA)</th>
<th>Short term exposure limit (STEL)</th>
<th>Carcinogen category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>1 ppm mg/m³</td>
<td>2 ppm mg/m³</td>
<td>2</td>
</tr>
</tbody>
</table>

The content of formaldehyde in this product is less than 1%. Under normal usage of this product, the relevant exposure limits will not be exceeded.

No exposure standards have been set for the other components of this product.

**Exposure Potential** - Swallowing is unlikely under normal conditions of usage. Skin uptake and inhalation are possible routes of exposure. Ensure adequate ventilation if the product is used indoors.

**ENGINEERING CONTROLS**

No special requirements. Ensure adequate ventilation if the product is used indoors.

**PERSONAL PROTECTION**

Will irritate the eyes. Avoid contact with eyes.

When opening the container, preparing spray and using the prepared spray wear:

- elbow-length PVC gloves and
- face shield or goggles.

After each day’s use, wash gloves, and face shield or goggles.

**FLAMMABILITY**

This product is NON-FLAMMABLE.
SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT
Store in closed original container in a cool, well ventilated area as cool as possible. Do not store for prolonged periods in direct sunlight. Keep out of reach of children, unauthorised persons and animals.

Transport Classification – Sea (IMDG):
UN No.: 3082  Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS
Class: 9  SUBSTANCE, LIQUID, N.O.S.
Packing Group: III  Additional Information: FLUDIOXONIL 10%, MARINE POLLUTANT

SPILLS AND DISPOSAL
In case of spillage it is important to take all steps necessary to:

• Avoid eye and skin contact.
• Avoid contamination of waterways

Procedure for spill:
1. Keep all bystanders away.
2. Wear goggles, half face-piece respirator with combined dust and vapour cartridge, 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 (e.g. sand or soil).
5. Shovel the absorbed material into drums.
6. Disposal of the absorbed material will depend upon the extent of the spill.
   • For quantities up to 50L of product bury in a secure landfill site.
   • For quantities greater than 50L seek advice (use emergency contact number below) from the manufacturer before attempting disposal. Contain in a secure location until disposal method is established.
7. Decontaminate the spill area with detergent and water and rinse with the smallest volume of water practicable.

Dispose of empty, used containers by:
(a) Triple rinse or preferably pressure rinse containers with water. Add the rinsings to the spray tank. DO NOT dispose of undiluted chemicals on site.
(b) If recycling, replace cap and return clean containers to recycler or designated collection point.
(c) If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers 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.

FIRE/EXPLOSION HAZARD
Maxim 100FS is non-flammable and non-explosive. This product is a suspension in water. During a fire, after the water content has vaporised the remaining material is combustible and this product may release smoke and hazardous decomposition products. Extinguish warehouse and factory fires using fine-water spray or foam. When fighting a major fire wear an air-supplied respirator. Do not allow fire-water to enter drains.

OTHER INFORMATION
Fludioxonil technical is harmful to fish and other aquatic organisms and toxic to algae. It is practically non-toxic to mammals, birds, bees and earthworms.

Note: This product is a registered agricultural chemical and must therefore be used in accordance with the container label directions. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the Federal health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

CONTACT POINT: Regulatory Affairs Manager - 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 MSDS 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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