MATERIAL SAFETY DATA SHEET

STATEMENT OF HAZARDOUS NATURE:
Hazardous according to the criteria of NOHSC

COMPANY DETAILS:
Syngenta Crop Protection Pty Limited
ABN 33 002 933 717
Level 1, 2-4 Lyon Park Road,
NORTH RYDE, NSW, 2113

Date of Issue: February 2005

IDENTIFICATION

PRODUCT NAME: DYNASTY® Fungicide Seed Treatment
Formulation type: suspension concentrate
Product Code No.: A-13012B
Active Ingredients:
zoxystrobin
metalaxyl-M
fludioxonil
Chemical types:
strobilurin
phenylamide
phenylpyrrole

USE: Seed treatment for the control of seedling damping-off caused by Pythium spp and Rhizoctonia solani in Cotton.

PHYSICAL DESCRIPTION/PROPERTIES
Appearance: Cream liquid
Odour: Sweetish, slightly pungent
Volutility: Not available

OTHER PROPERTIES
Specific gravity: 1.12 (20°C)
Surface tension: 38.7 mN/m (0.1% aq. susp.)
Explosive properties: Not explosive.
Corrosiveness: Non-corrosive
Oxidising properties: Not an oxidiser

INGREDIENTS

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Content (%w/v)</th>
</tr>
</thead>
<tbody>
<tr>
<td>azoxystrobin technical</td>
<td>&gt;7.5</td>
</tr>
<tr>
<td>to give azoxystrobin</td>
<td>131860-33-8</td>
</tr>
<tr>
<td>metalaxyl-M (technical grade)</td>
<td>&gt;3.75</td>
</tr>
<tr>
<td>to give metalaxyl-M</td>
<td>70630-17-0</td>
</tr>
<tr>
<td>fludioxonil (technical grade)</td>
<td>&gt;1.25</td>
</tr>
<tr>
<td>to give fludioxonil</td>
<td>131341-86-1</td>
</tr>
<tr>
<td>other ingredients determined not to be hazardous</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 indicate the product is NOT HARMFUL following single doses of undiluted product.
(LD₅₀ = 5000 mg/kg)

Dermal absorption: LOW TOXICITY
Tests on rats indicate the product is NOT HARMFUL due to skin contact following single doses of undiluted product.
(LD₅₀ >5000 mg/kg)

Inhaled: **LOW TOXICITY**
Tests on rats indicate the product is **NOT HARMFUL** due to inhalation of the undiluted product.
(LC50 (4 hr) > 5340 mg/m³ - highest attainable concentration)

**Irritation** (based on studies with rabbits using undiluted product):
- **Eye:** SLIGHT IRRITANT
- **Skin:** SLIGHT IRRITANT

**Sensitisation** (based on studies with Guinea pigs using undiluted product)
- **Skin:** POTENTIAL SKIN 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)
- **Azoxystrobin technical** has been extensively tested on laboratory mammals and in test-tube systems. No evidence of mutagenic, neurotoxic, carcinogenic, teratogenic or reproductive effects was obtained.
- **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.
- **Metalaxyl-M**, either as technical grade metalaxyl-M or as a 50% component of technical grade metalaxyl, has been extensively tested on laboratory mammals and in test-tube systems. No evidence of mutagenic, 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. **NOTE:** Never give anything by mouth to an unconscious person.

**PRECAUTIONS FOR USE**

**EXPOSURE STANDARDS**
No exposure standards have been set for the components of this product.

**Exposure Potential** - Swallowing is unlikely under normal conditions of usage. Skin uptake is possible route of exposure. Inhalation is an unlikely route of exposure as the product is applied as a seed treatment.

**ENGINEERING CONTROLS**
No special requirements.

**PERSONAL PROTECTION**
Will irritate the eyes. Avoid contact with eyes. Repeated exposure may cause allergic disorders. Wash hands after use.
When preparing the slurry, wear:
- cotton overalls buttoned to the neck and wrist,
- a washable hat,
- elbow-length PVC gloves, and
- face shield.
When using the prepared slurry, wear:
- cotton overalls buttoned to the neck and wrist,
- a washable hat, and
- elbow-length PVC gloves.
After each day's use, wash gloves, face shield and contaminated clothing.

**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 – Road and Rail (ADG), and Sea (IMDG):
UN No.: 3082 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS
Class: 9 SUBSTANCE, LIQUID, N.O.S.
Packing Group: III Additional Information: AZOXYSTROBIN 7.5%, 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 spill 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 water

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 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
Dynasty is non-flammable and non-explosive. This product is a suspension in water. During a fire, after the water content has vapourised 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
This product is dangerous to fish and other aquatic organisms and toxic to algae. It is practically non-toxic to mammals, birds, bees and earthworms. The active ingredients have a low bioaccumulation potential. Azoxystrobin is not persistent in soil, is stable in water and has moderate mobility in soil. Fludioxonil is persistent in soil, stable in water and has low mobility in soil. Metalaxyl-M is not persistent in soil or water, and has moderate mobility in soil.

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) 8876 8444
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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