## MATERIAL SAFETY DATA SHEET

### COMPANY DETAILS:
Syngenta Crop Protection Limited  
Tower II, Level 7, 110 Symonds Street  
Private Bag 92618,  
Symonds Street  
AUCKLAND  
NEW ZEALAND

Telephone No.: (weekdays) 09 - 306 1500  
National Poisons & Hazchem Information Centre: 0800 POISON (0800 764 766)  
Emergency No. (24 Hours) 0800 734 607

### IDENTIFICATION

#### PRODUCT NAME:
MATCH®

<table>
<thead>
<tr>
<th>Formulation type:</th>
<th>Emulsifiable concentrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Ingredient:</td>
<td>Lufenuron, CGA 184699</td>
</tr>
<tr>
<td>Product Code No.:</td>
<td>A7814A</td>
</tr>
<tr>
<td>Chemical type:</td>
<td>Benzoylurea</td>
</tr>
<tr>
<td>UN Number:</td>
<td>1993</td>
</tr>
</tbody>
</table>

Dangerous Goods Class: 3  
Subsidiary risk:  
Hazchem Code: 3 [Y]  
Packaging Group: III  
Toxic substances Schedule: S4  
Marine Pollutant: No  
Proper Shipping Name: FLAMMABLE LIQUID, N.O.S (CONTAINS CYCLOHEXANONE 20%)

### USE:
Insecticide, an insect growth inhibitor to control leafrollers and codling moth on Apples and Pears.

### PHYSICAL DESCRIPTION/PROPERTIES

<table>
<thead>
<tr>
<th>Appearance:</th>
<th>Clear yellow-brown liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point:</td>
<td>min. 24°C Pensky martens c.c.</td>
</tr>
<tr>
<td>Odour:</td>
<td>Non specific</td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>No data</td>
</tr>
<tr>
<td>Flammability:</td>
<td>Flammable</td>
</tr>
<tr>
<td>Combustibility:</td>
<td>Combustible</td>
</tr>
<tr>
<td>Behaviour in water:</td>
<td>Emulsifiable</td>
</tr>
</tbody>
</table>

### OTHER PROPERTIES

| Viscosity: | No data |
| Volatility: | No data |
| pH value: | 3-7 (1% as emulsion) |
| Density: | 0.92-0.96 g/cm³ |

### INGREDIENTS -

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Content (% w/v)</th>
</tr>
</thead>
<tbody>
<tr>
<td>103055-07-8</td>
<td>50 g/L</td>
</tr>
<tr>
<td>108-94-1</td>
<td>200 g/L</td>
</tr>
<tr>
<td>&gt;40 g/L</td>
<td></td>
</tr>
<tr>
<td>&gt;500 g/L</td>
<td></td>
</tr>
<tr>
<td>60 g/L</td>
<td></td>
</tr>
<tr>
<td>up to 100%</td>
<td></td>
</tr>
</tbody>
</table>

### HEALTH HAZARD INFORMATION

#### HEALTH EFFECTS

**ACUTE**

**Toxicity**  
- This product is slightly hazardous (WHO Hazard Class III)

**Swallowed:** LOW TOXICITY  
Tests on rats indicate a low toxicity following single doses of the undiluted product.  
\(LD_{50} >3000\ \text{mg/kg}\)

**Dermal absorption:** LOW TOXICITY  
Tests on rats indicate a low toxicity due to skin contact with the undiluted product.  
\(LD_{50} >4000\ \text{mg/kg}\)

**Marine Pollutant:** No

**Toxic substances Schedule:** S4

**Proper Shipping Name:** FLAMMABLE LIQUID, N.O.S (CONTAINS CYCLOHEXANONE 20%)
Inhaled: **LOW TOXICITY**
Tests on rats indicate an low toxicity due to inhalation of the undiluted product.
(LC$_{50}$ (4 h) >5300 mg/m$^3$)

**Irritation**

Eye: **STRONG IRRITANT**
Skin: **STRONG IRRITANT**

**Sensitisation**
- (guinea pigs) -
Skin: **NON-SENSITISER**

**Poisoning symptoms:** No case of human poisoning is on record.

**CHRONIC (Active Ingredient)**
Lufenuron technical has been extensively tested on laboratory mammals and in test tube systems. No evidence of mutagenic, carcinogenic, teratogenic or reproductive effects were obtained.

**FIRST AID**
In case of poisoning by any exposure route contact a doctor or Poisons Information Centre.

- **Swallowed:** If poisoning occurs contact a doctor or Poisons Information Centre. If swallowed DO NOT induce vomiting. Give a glass of water. Begin artificial respiration if victim is not breathing. Use mouth to nose rather than mouth to mouth.
- **Eye:** Will irritate the eyes. Avoid contact with eyes. If product gets in eyes wash it out immediately with water.
- **Skin:** Will irritate the skin. Avoid contact with skin. If skin contact occurs remove contaminated clothing and wash affected areas thoroughly with soap and water.
- **Inhaled:** Move person to fresh air and keep at rest until recovered.

**ADVICE TO DOCTOR**
No specific antidote is available. If poisoning is suspected apply symptomatic therapy.

**PRECAUTIONS FOR USE**

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

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

**Exposure Potential**
**Re-entry Period** - Under field conditions the spray should be allowed to dry on the foliage before re entry into treated areas.

**ENGINEERING CONTROLS**
No special requirements. Product is used outdoors.

**PERSONAL PROTECTION**
Harmful if inhaled or swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. Avoid inhaling vapour or spray mist. When opening the container and preparing the spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or goggles. If product on skin, immediately wash area with soap and water. After use and before eating, drinking or smoking wash hands, arms and face thoroughly with soap and water. After each day’s use, wash gloves and face shield or goggles and contaminated clothing.

**FLAMMABILITY**
This product is FLAMMABLE.
SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT
Store away from sun and damp, in original tightly closed containers, in well ventilated area apart from food or feed.
Avoid storage in temperatures below -10°C and above 35°C.

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:
Remove heavily contaminated soil layer and bury in a safe place away from water supplies.

(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) Dispose 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 from the manufacturer (use emergency contact number below) 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 rinsing or preferably pressure rinsing 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.
(d) Burning of empty containers if circumstances, especially wind conditions, permit is an alterative method.

FIRE/EXPLOSION HAZARD
This product is flammable. Extinguish warehouse and factory fires using fine-water spray or foam. During a fire this product may release smoke and hazardous decomposition products. When fighting a major fire wear an air-supplied respirator.

OTHER INFORMATION
Highly toxic to crustaceans. Slightly toxic to fish and bees.

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 Government health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

CONTACT POINT:
Business Manager - Crop Protection (09) 306 1500
24 HOURS EMERGENCY CONTACT: 0800 734 607

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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