

## NEBIJIN<sup>®</sup>

Date of Issue: 28<sup>th</sup> September 2006

### 1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

**Chemical name of active ingredient(s):** Flusulfamide

**Recommended use:** Fungicide

**Supplier:** Elliott Technologies Limited  
45 Kitchener Road  
Pukekohe  
Phone 0800 100 325

**Emergency telephone number:** 0800 Poison (0800 764 766) 24 Hours

### 2. HAZARDS IDENTIFICATION

**Hazard Classification:** Toxic - 6.1D, 6.8B, 6.9B,  
Ecotoxic – 9.1B, 9.3C

**Required identification Details:** Toxic to aquatic organisms.  
Harmful to terrestrial vertebrates.

HARMFUL – may be harmful if swallowed, inhaled or absorbed through the skin.

Repeated exposure at high doses may cause reproductive/developmental damage.

Repeated exposure at high doses may cause damage to organs.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance/preparation Information on hazardous ingredients

Common name	CAS No	%
Flusulfamide	106917-52-6	5%
Inert ingredients		7%
Water		88%

### 4. FIRST-AID MEASURES

#### Description of necessary first aid measures:

#### Effects and symptoms

#### First-aid measures

#### **Inhalation:**

Remove victim to fresh air. If breathing is difficult: artificial respiration. Get medical attention.

#### **Ingestion:**

Wash out mouth with plenty of water. Get medical attention. Never give anything by mouth to an unconscious person. Seek medical attention.

<b>Skin contact:</b>	Remove victim from area of exposure. Wash off remaining material with plenty of water. Remove contaminated clothing. Wash away remainder with water and soap.
<b>Eye contact:</b>	Wash out with plenty of water with the eyelid held wide open for at least 15 minutes. Get medical attention.
<b>Notes to a physician:</b>	There is no specific antidote. Treat symptomatically and give supportive therapy.

---

## 5. FIRE-FIGHTING MEASURES

<b>HAZCHEM Code:</b>	2X
<b>Extinguishing media :</b>	Fine spray, Foam, dry chemical, Fog
<b>Hazardous thermal (de)composition products:</b>	None known.
<b>Protection of fire-fighters:</b>	Self-contained breathing apparatus and total protection required in enclosed areas.

---

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions:</b>	Wear PVC overalls, chemical resistant gloves, facemask or goggles.
<b>Environmental precautions:</b>	Contain Spills. Do not discharge into drains or the environment.
<b>Methods for cleaning up:</b>	Prevent further spillage. Adsorb spilled product and place in sealable container for disposal. Wash down affected area with water plus detergent. Absorb and collect washings and place in the same sealable container for disposal. Seek advice from the local authority regarding disposal.

---

## 7. HANDLING AND STORAGE

<b>Handling:</b>	Avoid contact with eyes and skin. Harmful if swallowed.
<b>Storage:</b>	Keep only in the original container. Keep in a cool, dry, well ventilated place away from direct sunlight. Keep away from feed and foodstuffs.
<b>Packaging materials:</b>	HDPE Plastic

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace Exposure Guidelines

<b>Exposure standards:</b>	None Established
<b><u>Engineering measures</u></b>	
<b>Exposure control measures:</b>	Use only in a well ventilated area
<b><u>Personal Protective Equipment</u></b>	

## Detail specifications for equipment:

<b>Respiratory system:</b>	Avoid breathing spray mist. Wear an approved face mask that gives protection against vapours.
<b>Skin and body:</b>	Avoid contact with skin and eyes.
<b>Hands:</b>	Use gloves chemically resistant (eg: nitrile or neoprene) when prolonged or frequently repeated contact could occur.
<b>Eyes:</b>	Use safety glasses if exposure possible.
<b>General hygiene:</b>	When handling do not eat, drink or smoke. Wash hands thoroughly after handling. Wash clothing separately before re-use.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State: Colour, Odour.</b>	Yellowish white coloured liquid with a little appreciable odour.
<b>pH:</b>	Not available
<b>Vapour Pressure:</b>	$9.9 \times 10^{-7}$ mPa (40 °C) (Active ingredient)
<b>Boiling Point:</b>	Not available
<b>Freezing/melting point:</b>	Not available
<b>Solubility:</b>	Water - 2.9mg/kg @ 25 °C (Active ingredient)
<b>Specific gravity:</b>	1.019 at 23.8°C
<b>Flashpoint:</b>	Not applicable
<b>Octanol/water partition coefficient:</b>	$K_{ow} \log P = 2.8 \pm 0.5$ (Active ingredient)
<b>Explosion properties:</b>	Not Explosive.
<b>Oxidation properties:</b>	Not an Oxidizing Agent

---

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Conditions to avoid:</b>	Avoid excessive heat, flames and sunshine
<b>Materials to avoid:</b>	None known
<b>Hazardous decomposition Products:</b>	None known
<b>Hazardous polymerization:</b>	Not subject to polymerization
<b>Specific Data:</b>	
<b>Hazardous reactions :</b>	None expected

---

## 11. TOXICOLOGICAL INFORMATION

<b>Acute toxicity – Oral :</b>	LD50 (rat) >2193 mg/kg LD50 (mouse) >3,446 mg/kg
<b>Acute toxicity - Dermal :</b>	>= 2000 mg/kg rabbits
<b>Acute toxicity – Inhalation:</b>	Not available
<b>Skin irritation :</b>	Very slightly skin irritant
<b>Eye irritation:</b>	Very slightly eye irritant
<b>Sensitization :</b>	Not a sensitizer

### Chronic toxicity

<b>Mutagenicity:</b>	Not mutagenic
<b>Reproduction toxicity:</b>	Not a reproductive toxin

**Other information :**

---

**12. ECOLOGICAL INFORMATION**

<b>Ecotoxicity</b>	Very toxic to aquatic organisms – avoid contamination of any water supply with product or empty container.
<b>Rainbow trout</b>	
<b>Daphnia magna</b>	
<b>Algae</b>	Harmful to terrestrial vertebrates
<b>Birds</b>	Bobwhite Quail – LD <sub>50</sub> 66mg/kg (Active ingredient)
<b>Bees</b>	LD <sub>50</sub> >200µg/Bee (Active ingredient)

---

**13. DISPOSAL CONSIDERATIONS**

<b>Methods of disposal :</b>	Triple rinse container and add to spray tank, burn if permitted and circumstances, particularly wind direction, permit, otherwise crush and bury in an approved landfill. Do not contaminate any waterway with chemical or empty container. Ensure that any unwanted product is used in accordance with label directions.
------------------------------	---

---

**14. TRANSPORT INFORMATION - International transport regulations**

<b>UN number:</b>	<b>3082</b>
<b>Class or Division:</b>	<b>9</b>
<b>Packing Group:</b>	<b>III</b>
<b>Marine Pollutant:</b>	<b>No</b>
<b>Proper shipping name :</b>	<b>Environmentally hazardous substance, Liquid, N.O.S. Flusulfamide.</b>

---

**15. REGULATORY INFORMATION**

<b>ACVM Registered Number:</b>	<b>P5603</b>
<b>HSNO Approval Code:</b>	<b>HSR000626</b>

---

**16. OTHER INFORMATION**

<b>Additional information:</b>	<b>Original Issue Date:</b> 28 <sup>th</sup> September 2006 <b>Revision Date:</b> N/A <b>Replaces:</b> N/A
--------------------------------	--

**Disclaimer EXCLUSION OF LIABILITY: PLEASE READ**

*This Safety Data Sheet is based on the most recent information available. To the extent permitted by law, users of this information accept that neither the manufacturer, Elliott Technologies Limited as distributor, nor any other distributor have any liability or responsibility whatsoever for any loss, damage or injury whether in contract or tort, whether direct, indirect or consequential howsoever arising in connection with the supply of these information.*

*Nebijin ® is a registered trademark of Mitsui Chemicals, Inc., Tokyo, Japan*