



## SAFETY DATA SHEET

### Section 1. Identification of the material and the supplier

Product: **STELLAR FUNGICIDE**  
Chemical Name of Active Ing: Epoxiconazole: C17H13CIFN3O  
Product Use: Fungicide  
Restriction of Use: Refer to Section 15

New Zealand Supplier: ADAMA New Zealand Ltd  
Address: Level 1/93 Bolt Road  
Tahunanui, Nelson  
Telephone: +64 3 543 8275  
Email: [nzorders@adama.com](mailto:nzorders@adama.com)

**Emergency Telephone: 0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 2 July 2019

### Section 2. Hazards Identification

**This substance is hazardous according to the *Hazardous Substances (Classification) Notice 2017***

**EPA Approval No:** HSR000723

#### Pictograms



Chronic



Ecotoxic

Signal Word: **Warning**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.8B	H361	Suspected of damaging fertility or the unborn child.	Repr. 2
6.9B	H373	May cause damage to organs through prolonged or repeated exposure.	STOT RE 2
9.1B	H411	Toxic to aquatic life with long lasting effects.	Aquatic Chronic 2

Prevention Code	Prevention Statement
P103	Read label before use.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe fumes, vapours or spray.
P273	Avoid release to the environment.
P281	Use personal protective equipment as required.

Response Code	Response Statement
P314	Get medical advice/attention if you feel unwell.
P391	Collect spillage.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.

Storage Code	Storage Statement
P405	Store locked up.

Disposal Code	Disposal Statement
P501	Wherever possible completely use material by using according to label instructions. Dispose of unwanted product and wastes from spillages as hazardous substances in accordance with local and national regulations using a licensed waste disposal company. Triple rinse containers and add rinsate to spray tank before puncturing and offering for recycling or landfill. Do not allow product to enter waterways. Do not burn product or container.

### Section 3. Composition / Information on Ingredients

Ingredients	Wt %	CAS NUMBER.
Epoxiconazole	125	133855-98-8
Alkoxyated fatty alcohol	>10	68002-96-0
Solvesso 200	>10	64742-94-5

### Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
If on Skin	Remove contaminated clothing. Gently wash skin with water and soap for 15 minutes or until chemical is removed. If skin irritation occurs: Get medical advice/ attention.
If Swallowed	If swallowed do NOT induce vomiting. Wash out mouth with plenty of water. Get medical attention. Never give anything by mouth to an unconscious person.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

### Most important symptoms and effects, both acute and delayed

#### Symptoms:

**Ingestion:** Not applicable

**Inhalation:** Not applicable

**Skin:** Not applicable

**Eye:** Not applicable

**Chronic:** Suspected of damaging fertility or the unborn child.  
May cause damage to organs through prolonged or repeated exposure.

### Section 5. Fire Fighting Measures

<b>Hazard Type</b>	Non Flammable or combustible
<b>Hazards from products</b>	Thermal decomposition may generate: carbon monoxide, carbon dioxide, nitrogen oxide, hydrogen chloride, HF

<b>Suitable Extinguishing media</b>	Water spray, water fog, foam.
<b>Precautions for firefighters and special protective clothing</b>	When fighting fires involving significant quantities of this product, wear a splash suit complete with self-contained breathing apparatus. Fight fire from protected area. Dike fire control water for later disposal.
<b>HAZCHEM CODE</b>	<b>2X</b>

## Section 6. Accidental Release Measures

Wear suitable protective clothing, gloves and eye/face protection. Evacuate all unnecessary personnel.

### Environmental precautions

In the event of a major spill, prevent spillage from entering into drains and water courses.

### Methods and material for containment and cleaning up

In the event of a minor spillage: Absorb in sand or other inert material. Use appropriate container to avoid environmental contamination.

In the event of major spillage: Collect and contain as much free liquid as possible. Dike spills using absorbent or impervious materials such as sand or clay for later disposal.

## Section 7. Handling and Storage

### Precautions for Handling:

- Read label before use.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Do not breathe fumes, vapours or spray.
- Do not eat, drink or smoke while using.
- When mixing or applying wear appropriate protective clothing including cotton overalls buttoned to the neck and wrist, impervious, elbow-length gloves, and eye protection. Remove protective clothing and wash hands, arms and face with soap and water before meals and after work.
- Avoid release to the environment.

### Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep out of reach of children.
- Store locked up.
- Store in original, unopened container in cool, dry place, well ventilated place, out of direct sunlight and away from stockfeed or foodstuffs.
- As a Class 9 Substance with Ecotoxicity Classifications storage of Stellar Fungicide must be carried out in such a manner as to prevent contamination of waterways. It is recommended that The New Zealand Standard for the Management of Agrichemicals (NZS8409) is followed as a means of meeting the secondary containment provisions of the HSNO Emergency Management Regulations.

## Section 8 Exposure Controls / Personal Protection

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue

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change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2017 9TH EDITION.

## Engineering Controls

Ventilation required.

## Personal Protection Equipment



<b>Eyes</b>	Safety goggles or face shield.
<b>Hands and Skin</b>	Chemical resistant gloves. Wear suitable protective clothing. Chemical resistant boots.
<b>Respiratory</b>	Respiratory protection is not required if good ventilation is maintained.
<b>General</b>	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower. Wash hands thoroughly after handling. Wash clothing before re-using.

## Section 9 Physical and Chemical Properties

<b>Appearance</b>	White liquid
<b>Odour</b>	Characteristic
<b>Odour Threshold</b>	Not applicable
<b>pH</b>	4-7 at a temperature of 20 °C
<b>Boiling Point</b>	Not applicable
<b>Melting Point</b>	Epoxiconazole: 136.1-137.6°C
<b>Flash Point</b>	>100°C
<b>Flammability</b>	Non Flammable
<b>Upper and Lower Exposure Limits</b>	Not applicable
<b>Vapour Pressure</b>	Not applicable
<b>Density</b>	1.03 -1.05
<b>Solubilities in water</b>	dispersible
<b>Octanol/water partition coefficient</b>	Not applicable
<b>Auto-ignition Temperature</b>	Not applicable
<b>Viscosity</b>	High viscous, surface tension = 31.2 mN/m
<b>Molecular weight:</b>	Epoxiconazole: 329.8
<b>Decomposition point:</b>	Not applicable
<b>Surface tension mN/m:</b>	Not applicable

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	This product is stable under normal conditions.
<b>Conditions to Avoid</b>	Protect from (sun) light, open flame and sources of heat. Decomposes upon heating.
<b>Incompatible Materials</b>	Avoid contact with: strong bases
<b>Hazardous Decomposition Products</b>	Thermal decomposition generates: carbon dioxide, carbon monoxide, nitrogen oxides, hydrogen chloride, HF.

## Section 11 Toxicological Information

### Acute Effects:

<b>Swallowed</b>	Not applicable.
<b>Dermal</b>	Not applicable.
<b>Inhalation</b>	Not applicable.

<b>Skin</b>	Not applicable.
<b>Eye</b>	Not applicable.

**Chronic Effects:**

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	Suspected of damaging fertility or the unborn child.
<b>Germ Cell Mutagenicity</b>	Not applicable.
<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	Not applicable.
<b>STOT/RE</b>	May cause damage to organs through prolonged or repeated exposure.

**Preparation      Epoxiconazole**

Toxicity information: No toxicological information is known on the product. For a similar formulation containing 125g/l Epoxiconazole.

Rat oral: LD50 >2,000 mg/kg  
Rat dermal: LD50 >2,000 mg/kg  
Rat inhalation: LC50 > 5.00 mg/L  
Dermal irritation (rabbit): Not irritant  
Eye irritation (rabbit): Not irritant  
Sensitization: Guinea pig maximization test: Non sensitiser  
Carcinogenicity: Cat 3: limited evidence of a carcinogenic effect.  
Reproduction toxicity: Cat 3: Possible risk of impaired fertility  
Cat 3: Possible risk of harm to the unborn child

**Section 12. Ecotoxicological Information**

HSNO Classes: 9.1B = Toxic to aquatic life with long lasting effects.

<b>Persistence and degradability</b>	No data available
<b>Bioaccumulation</b>	No data available
<b>Mobility in Soil</b>	No data available
<b>Other adverse effects</b>	No data available

**For a similar formulation containing 125g/l Epoxiconazole.**

96

H-LC50 Rainbow trout 7.8 mg/l  
96 H-LC50 Carp 11.4 mg/l  
48 H-LC50 Daphnia magna 17 mg/l  
72 H-ErC50 Algae 7 mg/l  
72 H-EbC50 Algae 0.28 mg/l

Do not allow to enter waterways.

**Section 13. Disposal Considerations**

**Disposal Method:** Triple rinse empty container and add rinsate to spray tank. Burn in an appropriate incinerator, if circumstances such as wind direction permit. Otherwise crush or puncture and bury in a suitable landfill, or if appropriate, recycle.



**Precautions and methods to avoid:**

Avoid contamination of any water supply with product or empty container.

This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2012



### **Road and Rail Transport**

UN No: 3082  
 Class-primary 9  
 Packing Group III  
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, (EPOXICONAZOLE)

### **Air Transport**

UN No: 3082  
 Class-primary 9  
 Packing Group III  
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, (EPOXICONAZOLE)

### **Marine Transport**

UN No: 3082  
 Class-primary 9  
 Packing Group III  
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, (EPOXICONAZOLE)  
 Marine Pollutant Yes

### **Special Provisions:**

If the product's individual container is below 5L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

## Section 15

## Regulatory Information

**This substance is hazardous according to the Hazardous Substances (Classification) Notice 2017**

EPA Approval Code: HSR000723  
 HSNO Classification: 6.8B, 6.9B, 9.1B

Refer to EPA website [www.epa.govt.nz](http://www.epa.govt.nz) for controls document - HSR000723

HSW (HS) Regulations 2017	Trigger Quantity/Regulation
HSW(Hazardous substance) Regulations Part 4 Certified Handlers and supervision and training of workers	HSW Reg 4.5 – 4.6 Information, instruction, training and supervision.
Location Certificate	Not required
Signage Trigger Quantities (Schedule 3)	1000L (9.1B)
Emergency Response Plan (Schedule 5)	1000L (9.1B)
Secondary Containment (Schedule 5)	1000L (9.1B)
Tracking (Schedule 26)	Not required
HSNO Additional Controls (Restrictions of use)	
77A	The substance must not be applied onto or into water.
Hazardous Property Controls Notice 2017	
HPC Notice Part 4 Clause 47	Equipment for class 9 substances must be

	appropriate
HPC Notice Part 4 Clause 48	Records of application of class 9 pesticides and plant growth regulators
HPC Notice Part 3	Hazardous substances in a place other than a workplace
HPC Notice Part 4 Subpart A	Site and storage controls for class 9 substances
<b>ACVM Act and Regulations</b>	
ACVM Approval No See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a> for registration controls	P7854

## Section 16 Other Information

### Glossary

EC50	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
LC50	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD50	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

### References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

### Disclaimer

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Please contact the ADAMA, if further information is required.

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