

## SAFETY DATA SHEET

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

**1.1. Identification of the substance or preparation:**

**ISARID**

**1.2. Use of the substance / preparation:**

Mycoinsecticide for agricultural use. For professional use only. Wettable powder.

**1.3. Company / undertaking identification:**

**Koppert Biological Systems, Inc.**

1502 Old US 23

Howell, MI 48843

United States

Tel: +1 (810) 632-8750

Fax: +1 (810) 632-8771

Email: info@koppert.com

**1.4. Emergency telephone:**

Poison Control Center 1-800-222-1222

### SECTION 2. HAZARD(S) IDENTIFICATION

**2.1. Classification of the substance or mixture:**

**Directive 67/548/EC and Directive 1999/45/EC:**

This product was classified in accordance with Directive 67/548/EC and Directive 1999/45/EC, adapting the requirements to Regulation (EC) n° 1272/2006 (REACH regulation).

Xi: R42 – May cause sensitization by skin contact

**CLP Regulation (EC) n° 1272/2008:**

The product is not classified as dangerous according to CLP Regulation (EC) n° 1272/2008.

**2.2. Label elements:**

**CLP Regulation (EC) No. 1272/2008**



**Hazard indications:**

Skin Sens. 1: H317 – May cause an allergic skin reaction

**Cautionary advice:**

Non-applicable

**Supplementary information:**

EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

**2.3. Other hazards:**


Non-applicable

### SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Chemical description:** Mixture of substances

**Components:**

In accordance with Annex II of Regulation (EC) n°1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: Non-applicable EC: Non-applicable Index: Non-applicable REACH:Non-applicable	<b>Paecilomyces fumosoroseus strain FE 9901</b> Self-classified Regulation 1272/2008 Skin. Sens 1: H317 – Warning 	<b>10 - &lt;25 %</b>

To obtain more information on the risk of the substances consult sections 8, 11, 12 and 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the MSDS of this product.

#### By inhalation:

This product does not contain substances classified as dangerous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

#### By skin contact:

In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of modifications, on the skin (stinging, redness, rashes, blisters, ...), seek medical advice with this Security Data Sheet

#### By eye contact:

This product does not contain substances classified as dangerous for eye contact. Rinse eyes thoroughly for at least 15 minutes with luke warm water, ensuring that the person affected does not rub or close their eyes.

#### By consumption:

In case of consumption, seek immediate medical assistance showing the MSDS of this product.

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

Acute and delayed effects are indicated in sections 2 and 11.

### 4.3 Indication of any immediate medical attention and special treatment needed:

Non-applicable

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media:

Product is non-flammable under normal conditions of storage, manipulation and use. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use tap water as an extinguishing agent.

### 5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive subproducts are created that can become highly toxic and, consequently, can present a serious health risk.

### 5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

#### Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures:**  
Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal  
See sections 8 and 13.
- 6.2 Environmental precautions:**  
In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container.
- 6.3 Methods and material for containment and cleaning up:**  
It is recommended:  
Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal
- 6.4 Reference to other sections:**  
See sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling:**
- A.- Precautions for safe manipulation  
Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and destroy using safe methods (section 6).
  - B.- Technical recommendations for the prevention of fires and explosions  
Product is non-flammable under normal conditions of storage, manipulation and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.
  - C.- Technical recommendations to prevent ergonomic and toxicological risks  
Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.
  - D.- Technical recommendations to prevent environmental risks  
In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container.
- 7.2 Conditions for safe storage, including any incompatibilities:**
- A.- Technical measures for storage  
Minimum Temp.: 5 °C  
Maximum Temp.: 30 °C  
Maximum Time: 6 Months
  - B.- General conditions for storage  
Avoid sources of heat, radiation, static electricity and contact with food
- 7.3 Specific end use(s):**  
Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters:**  
Substances whose occupational exposure limits have to be monitored in the work environment There are no environmental limits for the substances contained in the product
- DNEL (Workers):**  
Non-applicable
- DNEL (Population): Non-applicable PNEC:**

Non-applicable

## 8.2 Exposure controls:



### A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protection Equipment, with the corresponding "CE marking" in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

### B.- Respiratory protection

LRP Pictogram	PPE	Labelling	CEN Standard	Remarks
 Compulsory use of face mask	Filter mask for particles		EN 149:2001+A1:2009	Replace when an increase in resistance to breathing is observed.



### C.- Specific protection for the hands

LRP Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves		EN 374-1:2003 EN 374-3:2003/AC:2006 EN 420:2003+A1:2009	Replace the gloves at any sign of deterioration.



### D.- Ocular and facial protection

LRP Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against liquid splash		EN 166:2001 EN 172:1994/A1:2000 EN 172:1994/A2:2001  EN 165:2005	Clean daily and disinfect periodically according to the manufacturer's instructions

### E.- Bodily protection

LRP Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing		EN 340:2003	For professional use only.
	Anti-slip work shoes		EN ISO 20347:2004/A1:2007 EN ISO 20344:2011	None

### F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2002	 Eyewash stations	DIN 12 899 ISO 3864-1:2002

**Environmental exposure controls:**

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

**Volatil organic compounds:**

With regard to Directive 1999/13/EC, this product has the following characteristics:

V.O.C. (Supply):	0 % weight
V.O.C. density at 20 °C:	0 kg/m <sup>3</sup> (0 g/L)
Average carbon number:	Non-applicable
Average molecular weight:	Non-applicable

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1. Information on basic physical and chemical properties:**

For complete information see the product datasheet.

**Appearance:**

Physical state at 20 °C:	Solid
Appearance:	Powdery
Color:	Grey
Odor:	Characteristic

**Volatility:**

Boiling point at atmospheric pressure:	Non-applicable*
Vapor pressure at 20 °C:	Non-applicable*
Vapor pressure at 50 °C:	Non-applicable*
Evaporation rate at 20 °C:	Non-applicable*

**Product description:**

Density at 20 °C:	1 – 1 kg/m <sup>3</sup> (ASTM D 2879-86)
Relative density at 20 °C:	Non-applicable*
Dynamic viscosity at 20 °C:	Non-applicable*
Kinematic viscosity at 20 °C:	Non-applicable*
Kinematic viscosity at 40 °C:	Non-applicable*
Concentration:	Non-applicable*
pH:	6 – 7 to 1 % (ASTM D3838-05)
Vapor density at 20 °C:	Non-applicable*
Partition coefficient n-octanol/water 20°C:	Non-applicable*
Solubility property :	Dispersible
Decomposition temperature :	Non-applicable*

**Flammability :**

Flash Point :	Non-Flammable (>60 °C)
Autoignition temperature :	Non-applicable*
Lower flammability limit :	Non-applicable*
Upper flammability limit :	Non-applicable*

**9.2. Other information :**

Surface tension at 20 °C:	Non-applicable*
Refraction index:	Non-applicable*

\*Not relevant due to the nature of the product, not providing information property of its hazards.

**SECTION 10: STABILITY AND REACTIVITY**

**10.1. Reactivity:**

No hazardous reactions are expected if the following technical instructions storage of chemicals. See section 7.

**10.2. Chemical stability:**

Chemically stable under the conditions of storage, handling and use

**10.3. Possibility of hazardous reactions:**

Under the conditions no hazardous reactions are expected to produce a pressure or excessive temperatures.

**10.4. Conditions to avoid:**

Applicable for handling and storage at room temperature

Stock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

**10.5. Incompatible materials:**

Acids	Water	Combustive materials	Combustible materials	Others
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

**10.6. Hazardous decomposition products:**

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1. Information on toxicological effects:**

The experimental information related to the toxicological properties of the product itself is not available

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A.- Ingestion:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for consumption. For more information see section 3.

B- Inhalation:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.

C- Contact with the skin and the eyes:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for skin contact. For more information see section 3.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.

E- Sensitizing effects:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensibilizing effects. For more information see section 3.

F- Specific target organ toxicity (STOT)-time exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
Isaria fumosoroseae strain FE 9901	LD50 oral	5000 mg/kg	Rat
CAS: Non-applicable	LD50 dermal	5000 mg/kg	Rat
EC: Non-applicable	LC50 inhalation	5000 mg/L	Rat

**SECTION 12: ECOLOGICAL INFORMATION**

The experimental information related to the ecotoxicological properties of the mixture itself is not available

**12.1. Toxicity:**

Not available

**12.2. Persistence and degradability:**

Not available

**12.3. Bioaccumulative potential:**

Not available

**12.4. Mobility in soil:**

Not available

**12.5. Results of PBT and vPvB assessment:**

Non-applicable

**12.6. Other adverse effects:**

Not described

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1. Waste treatment methods:**

Code	Description	Waste class (Directive 2008/98/EC)
02 01 08*	Agrochemical waste containing dangerous substances	Dangerous

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2000/532/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

**Regulations related to waste management:**

In accordance with Annex II of Regulation (EC) n°1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2000/532/EC: Commission Decision of 3 May 2000

**SECTION 14: TRANSPORT INFORMATION**

This product is not regulated for transport (ADR/RID, IMDG, IATA)

US DOT: Not Regulated

**SECTION 15: REGULATORY INFORMATION**

United States (EPA Reg. No. 89635-5)

This pesticide product is registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other information, including directions for use.

**CAUTION**

Hazards to Humans and Domestic Animals:

Caution. Harmful if absorbed through skin, inhaled, or swallowed. Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

**SECTION 16: OTHER INFORMATION**

**DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable