

SAFETY DATA SHEET

SECTION 1 - SUBSTANCE IDENTITY AND COMPANY INFORMATION

1.1 PRODUCT NAME:	DUOKARE™
1.2 COMPANY INFORMATION:	Koppert Biological Systems, Inc. 1502 Old US 23 Howell, MI 48843
1.3 CONTACT INFORMATION:	Tel: +1 (810) 632-8750 Fax: +1 (810) 632-8771 E-mail: info@koppert.com
1.4 EMERGENCY CONTACT:	Poison Control Center 1-800-222-1222

SECTION 2 - HAZARD IDENTIFICATION

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

2.1 Classification of the product:

No need for classification according to GHS criteria for this product.

2.2 Label elements:

The product does not require a hazard warning label in accordance with GHS criteria.

2.3 No particular hazards known:

This product should be handled according to good laboratory practices, with proper personal protective equipment, proper engineering controls and within the parameters of the user's safety program.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

No particular hazards known.

CAS Number:	N/A
Active ingredients:	<i>Bacillus simplex</i> <i>Coniochaeta nivea</i>
Inert ingredient:	Flowable powder

SECTION 4 - FIRST AID MEASURES

4.1 General advice:

Remove contaminated clothing.

4.2 If inhaled:

Keep patient calm, remove to fresh air.

4.3 If on skin:

Wash thoroughly with soap and water.

4.4 If swallowed:

Rinse mouth and then drink plenty of water.

4.5 If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

4.6 Most important symptoms and effects, both acute and delayed:

No significant reaction of the human body to the product known.

4.7 Indication of any immediate medical attention and special treatment needed:

Treat symptomatically (decontamination, vital functions).

SECTION 5 - FIRE FIGHTING MEASURES

5.1 General hazard:

No unusual fire or explosion hazards known to exist.

5.2 Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

5.3 Special hazards arising from the substance or mixture:

Hazards during firefighting:

Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides, the substances/groups of substances mentioned can be released in case of fire.

5.4 Advice for fire-fighters:

Protective equipment for firefighting:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency procedures:

Do not breathe vapor/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

6.2 Environmental precautions:

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3 Methods and material for containment and cleaning up:

For small amounts:

Pick up with suitable absorbent material (sand, sawdust, general binder).

For large amounts:

Barrier the spillage. Pump off product.

Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling:

No special measures necessary if stored and handled correctly according to the label. Ensure thorough ventilation of stores and work areas. When using do not eat, drink, or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

7.2 Protection against fire and explosion

No special precautions necessary. The product is non-combustible. The product is not explosive.

7.3 Conditions for safe storage, including any incompatibilities:

Segregate from foods and animal feeds.

7.4 Further information on storage conditions:

Store at 22°C.

Protect from direct sunlight.

Do not freeze.

Changes in the properties of the product may occur if substance/product is stored above or below indicated temperature for extended periods of time.

Handle and store according to instructions on the label.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Appropriate Engineering Controls:

Ensure adequate ventilation. Emergency eye wash fountains and safety showers should be available in immediate vicinity of any potential exposure.

8.2 Personal Protective Equipment

8.3 Respiratory protection:

Wear respiratory protection if ventilation is inadequate.

Where exposure through inhalation may occur from use, approved respiratory protection equipment is recommended.

8.4 Eye protection:

Wear safety glasses with side shields.

8.5 Hand protection:

Wear protective gloves.

8.6 Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g., protective clothing, head protection, apron, protective boots.

8.7 General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Store work clothing separately.

Keep away from food, drink, and animal feeding stuffs.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	dry powder
Color:	Tan
pH value:	approx. 7 (20 °C)
Density:	approx. 0.55 g/cm ³
Flash point:	N/A
Flammability:	N/A

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous decomposition products if stored and handled as prescribed / indicated. Based on its structural properties the material is not classified as oxidizing.

10.2 Chemical Stability:

This material is stable under normal conditions of use.

10.3 Possibility of hazardous reactions:

No hazardous reactions if stored and handled as prescribed / indicated.

10.4 Conditions to avoid:

see SDS Section 7 – Handling and Storage

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Primary Routes of Exposure:

Routes of entry for powders are inhalation and ingestion but may include eye or skin contact.

Eye Contact:	Data not available. Avoid eye contact.
Skin Contact:	Data not available. Avoid skin contact.
Skin Absorption:	Data not available. Avoid skin absorption.
Inhalation:	Data not available. Avoid inhalation.
Ingestion:	Data not available. Avoid ingestion.
Parenteral Exposure:	Data not available. Avoid parenteral exposure.
Skin Sensitization:	Data not available. Avoid skin contact.
Respiratory:	Data not available. Avoid inhalation.

Effects of Long Term or Repeated Exposure:	Data not available
Chronic Exposure–Teratogen:	Data not available
Chronic Exposure–Mutagen:	Data not available
Chronic Exposure–Reproductive Hazard:	Data not available

SECTION 12 - ECOLOGICAL INFORMATION

No ecological information is currently available.

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

Koppert

12.3. Bio accumulative 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 Disposal of material and container:

Follow local applicable waste disposal regulations for inoculants and plant amendments. Dispose in a safe manner.

SECTION 14 - TRANSPORT INFORMATION

Land transport US DOT

Not classified as a dangerous good under transport regulations.

Sea transport IMDG

Not classified as a dangerous good under transport regulations.

Air transport IATA /ICAO

Not classified as a dangerous good under transport regulations.

SECTION 15 - REGULATORY INFORMATION

No classification currently assigned.

Contact Koppert Biological Systems, Inc. for regulatory information.

SECTION 16 - OTHER INFORMATION

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