

**SAFETY DATA SHEET**

according to Regulation (EC) No.1907/2006

Version 4.0 Revision Date 03.06.2017

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**Material Safety Data Sheet  
Glabridin msds****Section 1: Identification of the Substance/Preparation and of the Company/Undertaking****Identification of the substance or preparation****Product Name** : Glabridin-90**INCI Name** : GLYCYRRHIZA GLABRA (LICORICE) ROOT EXTRACT**Company/undertaking identification****M.C.Biotec Inc.**

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Email: [mc@mcbiotec.com](mailto:mc@mcbiotec.com) Website: [www.mcbiotec.com](http://www.mcbiotec.com)**Section 2: Hazards Identification****Emergency Overview****OSHA Hazards**

No known OSHA hazards

**GHS Classification**

Chronic aquatic toxicity (Category 4)

**GHS Label elements, including precautionary statements**

Pictogram none

Signal word none

Hazard statement(s)

H413 May cause long lasting harmful effects to aquatic life.

Precautionary statement(s)

statement(s)

**HMIS Classification****Health hazard:** 0**Flammability:** 1**Physical hazards:** 0

**NFPA Rating**

<b>Health hazard:</b>	0
<b>Fire:</b>	1
<b>Reactivity Hazard:</b>	0

**Potential Health Effects**

<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Eyes</b>	May cause eye irritation.
<b>Ingestion</b>	May be harmful if swallowed.

**Section 3: Composition and Information on Ingredients**

Synonyms : (R)-4-(3,4-Dihydro-8,8-dimethyl-2H,8H-benzo[1,2-b:3,4-b']dipyran-3-yl)-1,3-benzenediol

Formula : C<sub>48</sub>H<sub>82</sub>O<sub>4</sub>

Molecular Weight : 723.16 g/mol

CAS-No.	EC-No.	Index-No.	Concentration (%)
(R)-4-(3,4-Dihydro-8,8-dimethyl-2H,8H-benzo[1,2-b:3,4-b']dipyran-3-yl)-1,3-benzenediol			
59870-68-7	-	-	-

**Section 4: First Aid Measures**

<b>Eyes Contact</b>	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.
<b>Skin Contact</b>	After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.
<b>Ingestion</b>	Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
<b>Additional</b>	Note to physician: Treat symptomatically.

<b>Information</b>
<b>Section 5: Fire Fighting Measures</b>
<p><b>Flammability of the Product:</b> May be combustible at high temperature.</p> <p><b>Auto-Ignition Temperature:</b> Not available.</p> <p><b>Flash Points:</b> Not available.</p> <p><b>Flammable Limits:</b> Not available.</p> <p><b>Products of Combustion:</b> These products are carbon dioxides.</p> <p><b>Fire Hazards in Presence of Various Substances:</b> Not available.</p> <p><b>Explosion Hazards in Presence of Various Substances:</b></p> <p>Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.</p> <p><b>Fire Fighting Media and Instructions:</b></p> <p><b>SMALL FIRE:</b> Use DRY chemical powder. <b>LARGE FIRE:</b> Use water spray, fog or foam. Do not use water jet.</p> <p><b>Special Remarks on Fire Hazards:</b> Not available.</p> <p><b>Special Remarks on Explosion Hazards:</b> Not available.</p>
<b>Section 6: Accidental Release Measures</b>
<p><b>Personal precautions</b></p> <p>Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.</p> <p><b>Environmental precautions</b></p> <p>Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.</p> <p><b>Methods and materials for containment and cleaning up</b></p> <p>Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.</p>
<b>Section 7: Handling and Storage</b>
<p><b>Precautions for safe handling</b></p> <p>Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.</p> <p><b>Conditions for safe storage</b></p> <p>Keep container tightly closed in a dry and well-ventilated place.</p> <p>Keep in a dry place.</p>
<b>Section 8: Exposure Controls/Personal Protection</b>

Contains no substances with occupational exposure limit values.

#### **Personal protective equipment**

##### **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

##### **Hand protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

##### **Eye protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### **Skin and body protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### **Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### **Section 9: Physical and Chemical Properties**

#### **Appearance**

**Form** : Powder

**Color** : Almost white

**Odor** : Not available

#### **Safety Data**

**pH** : no data available

**Boiling Point:** no data available

**Melting Point:** no data available

**Flash point** : 267 °C (513 °F) - closed cup

**Critical Temperature:** Not available.

**Specific Gravity:** Not available.

**Vapor Pressure:** Not applicable.

**Vapor Density:** Not available.  
**Volatility:** Not available.  
**Odor Threshold:** Not available.  
**Partition coefficient:** log Pow: 4.621  
n-octanol/water  
**Ionicity (in Water):** Not available

### Section 10: Stability and Reactivity

**Stability:** Stable under recommended storage conditions.  
**Instability Temperature:** Not available.  
**Materials to avoid:** Strong oxidizing agents  
**Hazardous decomposition products:** Hazardous decomposition products formed under fire conditions.  
- Carbon oxides  
**Special Remarks on Reactivity:** Not available.  
**Special Remarks on Corrosivity:** Not available.  
**Polymerization:** No.

### Section 11: Toxicological Information

**Acute toxicity**  
**Oral LD50**  
no data available  
**Inhalation LC50**  
no data available  
**Dermal LD50**  
no data available  
**Other information on acute toxicity**  
no data available  
**Skin corrosion/irritation**  
no data available  
**Serious eye damage/eye irritation**  
no data available  
**Respiratory or skin sensitization**  
no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

no data available

**Teratogenicity**

no data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

no data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

**Synergistic effects**

no data available

**Additional Information**

RTECS: Not available

**Section 12: Ecological Information****Toxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

no data available

**Section 13: Disposal Considerations****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**Section 14: Transport Information****DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

**Section 15: Regulatory Information****OSHA Hazards**

No known OSHA hazards

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

No SARA Hazards

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

	CAS-No.	Revision Date
Glabridin	13832-70-7	

**New Jersey Right To Know Components**

	CAS-No.	Revision Date
Glabridin	13832-70-7	

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**Section 16: Other Information**

**Other Special Considerations:** Not available.

**Disclaimer**

*The information above is based on our present knowledge. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. Users should make their own investigations to determine the suitability of the information for their particular purposes.*

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