

## **BIOSTRONG® 510**

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### **Section 1: Identification of the mixture and of the company**

#### **1.1 Product identifier:**

Trademark: BIOSTRONG® 510

#### **1.2 Relevant identified uses of the substance or mixture and uses advised against:**

Premixture of additives for animal feed production.

Not to be used for other purposes than recommended.

#### **1.3 Details of the supplier of the safety data sheet:**

##### **Manufacturer:**

Delacon Biotechnik GmbH  
Weissenwolffstr. 14  
A-4221 Steyregg  
Tel.: +43 732 640 531-0  
Fax: +43 732 640 533  
office@delacon.com

##### **Distributor:**

Purina Animal Nutrition, LLC.  
4001 Lexington Avenue North  
Arden Hills, MN 55126  
Phone: Non-Emergency Business Inquiries: 1-800-227-8941  
Monday – Friday, 8 am to 5 pm (Central Standard Time)

#### **1.4 Emergency telephone number:**

USA: Chem-Tel: 1-800-704-9215 (24 hrs)

### **Section 2: Hazards identification**

#### **2.1 Classification of the mixture:**

May cause an allergic skin reaction, Category 1 (H317)

May cause allergy or asthma symptoms or breathing difficulties if inhaled, Category 1 (H334)

Harmful to aquatic life with long lasting effects, Category 3 (H412)

#### **2.2 Label elements:**

##### **Hazard warnings:**



*Danger:* H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 – May cause an allergic skin reaction.

H412 – Harmful to aquatic life with long lasting effects.

Contains Anethole,  $\alpha$ -Pinene. May produce an allergic reaction.

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### Safety information (Prevention):

- P261 Avoid breathing dust.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P285 In case of inadequate ventilation wear respiratory protection.

### Safety information (Reaction):

- P321 Specific treatment (see section 4).  
P363 Wash contaminated clothing before reuse.  
P304+P341 If inhaled: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P342+P311 If experiencing respiratory symptoms: Call a poison center or doctor/physician.  
P302+P352 If on skin: Wash with plenty of soap and water.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

### Safety information (Disposal):

- P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

### 2.3. Other hazards

Neither the mixture nor its ingredients are classified as PBT or vPvB

## Section 3: Composition/ information on ingredients

### 3.2. Mixture

#### Chemical characterization

#### Description:

Mixture of the following substances with harmless additives.

Additional information:

The complete wording of the listed hazard warnings can be found in section 16.

CAS Nr	EINECS	% [w/w]	Identification	Classification
104-46-1	203-205-5	< 5.0 %	Anethole	Sens. Skin 1, H317
7785-26-4	232-077-3	< 1.0 %	$\alpha$ -Pinene	Fl. Liq. 3, H226 Skin Irrit. 2, H315 Sens. Skin 1, H317 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411

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### **Section 4: First aid measures**

#### **4.1 Description of first aid measures:**

<b>After inhaling:</b>	Provide plenty of fresh air and see a doctor as a precaution. In case of unconsciousness position and transport in lateral position.
<b>After skin contact:</b>	Immediately wash with plenty of soap and water.
<b>After eye contact:</b>	Rinse cautiously with water for several minutes.
<b>After swallowing:</b>	In case of persisting symptoms see a doctor.

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

<b>Acute:</b>	Irritation of the eyes.
<b>In case of preexisting sensitization:</b>	Irritation of the respiratory system or skin. Asthma symptoms, breathing difficulties.
<b>Delayed:</b>	Sensitization of skin and respiratory system.

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

Treatment, if needed, is symptomatic.

### **Section 5: Fire-fighting measures**

#### **5.1 Extinguishing media:**

<b>Suitable:</b>	Water, powder, foam, CO <sub>2</sub> . Fight bigger fires with water or alcohol resistant foam.
<b>Unsuitable:</b>	None known.

#### **5.2 Special hazards arising from the mixture:**

None known.

#### **5.3 Advice for firefighters:**

Standard protective equipment for firefighters.

### **Section: 6 Accidental release measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures:**

Wear protective gloves/protective suits/eye protection/skin protection. Provide sufficient venting, avoid dust formation.

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### **6.2 Environmental precautions:**

Do not allow release to drains, surface or ground water, in case of release inform responsible authorities.

### **6.3 Methods and material for containment and cleaning up:**

Collect mechanically into appropriate container and dispose according to local waste regulations. Avoid dust formation.

### **6.4 Reference to other sections:**

Details concerning personal protective equipment can be found in section 8.  
Remarks concerning disposal can be found in section 13.

## **Section 7: Handling and storage**

### **7.1 Precautions for safe handling:**

Avoid dust formation. Avoid spillage and release to the environment and into drains. Remove contaminated clothing immediately and wash before reuse. Wash hands after use.

### **7.2 Conditions for safe storage, including any incompatibilities:**

Store in a cool and dry place. Store in original packing, close opened packing thoroughly after use and use up soon.

### **7.3 Specific end-uses:**

The product is a premixture to be used solely for manufacturing of feed. It is to be mixed thoroughly and homogenously in final feeds.

## **Section 8: Exposure controls/personal protection**

### **8.1 Control Parameters:**

The product does not contain substances with limit values for the maximum workplace concentration.

### **8.2 Exposure controls:**

#### **Respiratory protection:**

Use dust mask (FFP2) against fine dust. Provide sufficient venting.

#### **Eye protection:**

Wear protective glasses.

#### **Skin protection:**

Protective gloves



The glove material must be impermeable and resistant to the mixture. No recommendation on the glove material can be given, no test results are available. Choose the glove material with regard to break through time, permeation rate and degradation.

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### **Section 9: Physical and chemical properties**

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

<b>Appearance:</b>	beige-brownish powdery substance
<b>Odor:</b>	aromatic herbal note; anise aroma
<b>Odor threshold:</b>	Data not available
<b>pH (10% aqueous solution):</b>	6.0
<b>Melting point/freezing point:</b>	Not applicable
<b>Initial boiling point and boiling range:</b>	Not applicable
<b>Flash point:</b>	Not applicable
<b>Evaporation rate:</b>	Not applicable
<b>Flammability:</b>	Ignition temperature 460 °C (dispersed dust) (Godbert-Greenwald-Oven) Glow temperature 340 °C (deposited dust)
<b>Burning test:</b>	Burning test at 20 °C: combustibility index = 3 Burning test at 100 °C: combustibility index = 5
<b>Upper/Lower flammability or explosive limit:</b>	Lower explosion limit: 125 g/m <sup>3</sup>
<b>Vapour pressure:</b>	Not applicable
<b>Vapour density:</b>	Not applicable
<b>Bulk density:</b>	0.55 kg/dm <sup>3</sup>
<b>Solubility:</b>	Partially miscible with water.
<b>Partition coefficient n-octanol/water:</b>	Data not available
<b>Auto-ignition temperature:</b>	The product is not auto-ignitable.
<b>Decomposition temperature:</b>	Data not available
<b>Viscosity:</b>	Not applicable
<b>Explosive properties:</b>	Dust-explosion class 1, p <sub>max</sub> = 7.5 bar, K <sub>St</sub> = 92 bar m/s
<b>Oxidizing properties:</b>	Data not available

#### **9.2 Other information:**

None

### **Section 10: Stability and reactivity**

#### **10.1 Reactivity:**

Data not available. No special reactivity hazards known.

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### **10.2 Chemical stability:**

Stable at normal temperature and pressure.

### **10.3 Possibility of hazardous reactions:**

No hazardous reactions known.

### **10.4 Conditions to avoid:**

High temperatures. High dust concentrations in the air.

### **10.5 Incompatible materials:**

None known.

### **10.6 Hazardous decomposition products:**

None known.

## **Section 11: Toxicological Information**

### **Information on toxicological effects:**

The listed data is valid for the mixture as a whole.

<b>Acute toxicity:</b>	LD <sub>50</sub> oral (rat) >2000 mg/kg
<b>Skin corrosion/irritation:</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/irritation:</b>	Based on available data, the classification criteria are not met.
<b>Respiratory or skin sensitization:</b>	The mixture is classified as skin sensitizing and due to possible dust formation a sensitizing effect on the respiratory system is assumed.
<b>Mutagenicity:</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity:</b>	Based on available data, the classification criteria are not met.
<b>Reproductive toxicity:</b>	Based on available data, the classification criteria are not met.
<b>STOT – single exposure:</b>	Based on available data, the classification criteria are not met.
<b>STOT – repeated exposure:</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard:</b>	Based on available data, the classification criteria are not met.

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### **Section 12: Ecological Information**

#### **12.1 Toxicity:**

##### **Aquatic Toxicity**

<b>Fish:</b>	LC <sub>50</sub> , acute toxicity test ( <i>Danio rerio</i> Hamilton-Buchanan; OECD 203), 96 h. Result: 367.6 mg/L
<b>Algae:</b>	EC <sub>50</sub> , growth inhibition test (OECD 201), 72 h. Result: Cell growth inhibition: 203.7 mg/L, growth rate inhibition: 221.0 mg/L
<b>Daphnia:</b>	EC <sub>50</sub> , Daphnia magna acute immobilization test (OECD 202), 48 h. Result: 322 mg/L
<b>Bacteria:</b>	Data not available

#### **12.2 Persistence and degradability:**

Data not available. Fast degradation expected.

#### **12.3 Bioaccumulative potential:**

Data not available.

#### **12.4 Mobility in soil:**

Data not available.

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

The mixture has no PBT or vPvB properties; assessed according to Annex XIII to REACH regulation.

#### **12.6 Other adverse effects:**

Data not available.

### **Section 13: Disposal considerations**

#### **13.1 Waste treatment methods:**

##### **Recommendations:**

Do not dispose of with domestic waste. Do not allow to enter the sewage system. Dispose of according to local regulations.

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### **Section 14: Transport information**

#### **14.1 UN Number**

Not classified as dangerous good.

#### **14.2 Proper UN identification of the shipment**

Not applicable.

#### **14.3 Class(es) of hazard for transport**

Not applicable.

#### **14.4 Packing group**

Not applicable.

#### **14.5 Environmental hazards**

Not hazardous to the environment according to transport regulations.

#### **14.6 Special safety measures for users**

None specified.

#### **14.7 Transport in bulk according to Annex II MARPOL 73/78 and IBC regulation**

Not transported in bulk

### **Section 15: Regulatory information**

#### **15.1 Safety, health and environmental regulations/legislation specific for the mixture:**

Regulation EC 1907/2006 (REACH)

Regulation EC 1272/2008 (CLP)

Regulation EC 1831/2003 on additives for use in animal nutrition

#### **15.2 Chemical safety assessment:**

A chemical safety assessment has not been carried out.



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### **Section 16: Other information**

#### **a) Change history of the safety data sheet**

Version 1, November 18th, 2014

Changes in sections 1.2, 2.3, 4.3, 5.3, 6.3, 8.2, 9.1, 10.2, 11, 12.1, 14, 15.1, 16 (version 2, March 18th, 2015)

Changes in sections 1.3 and 1.4, July 26<sup>th</sup> 2017

Changes in sections 1.3 and 1.4, October 04<sup>th</sup> 2018

#### **b) Abbreviations and acronyms:**

Skin Sens. 1:	Skin sensitization, category 1
Flam Liq. 3:	Flammable liquid or vapour, category 3
Skin Irrit. 2:	Skin irritation, category 2
Eye Irrit. 2:	Eye irritation, category 2
STOT SE 3:	Specific target organ toxicity, single exposure, category 3
Aquatic Chronic 2:	Chronic (long term) hazard to aquatic environment, category 2
PBT:	a persistent, bioaccumulative and toxic substance
vPvB:	a very persistent and very bioaccumulative substance
LD <sub>50</sub> :	Median lethal dose
EC <sub>50</sub> :	Half maximal effective concentration
LC <sub>50</sub> :	Median lethal concentration

#### **c) H- statements (Section 3):**

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

#### **d) Other information:**

All data mentioned represents our today's knowledge, it does not guarantee any product features or establishes any legal relationship.