



SAFETY DATA SHEET

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

Product Name: EB BIOTENE 10 T/PHYTASE W/O CC W/PIGMENTER 10LB
Product Code: E6442014
Use of the Substance / Preparation: Animal Feed Ingredient

Contact Manufacturer: ADM Animal Nutrition™
 1000 North 30th St.
 Quincy, IL 62301
 United States
 Tel. (+1) 217-222-7100 (business hours)

Emergency response telephone number: Chemtrec 1-800-424-9300 (CCN 1635)


2. HAZARDS IDENTIFICATION

Emergency Overview
 May form combustible dust concentrations in air (during processing and handling). Causes serious eye damage. May cause cancer - risk depends on duration and level of exposure. Contains > 0.1% of a category 1 carcinogen. Contains one or more components which may cause target organ damage as a result of repeated exposure. May cause cancer by inhalation. While essential minerals are safe in at low concentrations, chronic, excessive oral exposure or inhalation of manganese may produce manganism and lead to disorders of the central nervous system (CNS). Contains processed grain by-products, which may include peanut and wheat. Contains plant protein products, which may include peanut, soy, and tree nuts. Contains forage products, which may include soy.

Appearance	Physical State	Odor
Tan	Solid	No information available

Classification according to 29 CFR 1910, amended to conform to the United Nations' Globally Harmonized System of Classification and Labelling of Chemicals (GHS):	
Serious Eye Damage / Eye Irritation	Category 1
Carcinogenicity	Category 1
Specific Target Organ Toxicity (STOT) Repeated Exposure.	Category 2
OSHA Defined Hazard(s)	Combustible Dust
Hazards Not Otherwise Classified	One or more of the product component(s) is known to be listed as an OSHA 29 CFR 1910.1000 Air Contaminant. Occupational exposure limits are subsequently provided in section 8 of this SDS.

OSHA / GHS Label Elements

GHS Hazard Pictogram(s):	Note: The OSHA combustible dust hazard class does not have an assigned pictogram. 
Signal Word:	Danger

Hazard Statement(s):	May form combustible dust concentrations in air. H318 Causes serious eye damage H350 May cause cancer. H373 May cause damage to organs through prolonged or repeated exposure. H350i May cause cancer by inhalation Affected organ: Central Nervous System (CNS).
Prevention Precautionary Statements:	Wear eye/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/mist.
Response Precautionary Statements:	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor/physician. If exposed or concerned: Get medical advice/attention. Get medical advice / attention if you feel unwell.
Storage Precautionary Statements:	Store locked up.
Disposal Precautionary Statements:	Dispose of contents/container in accordance with all applicable national and local regulations.

Up to 5.405 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
Up to 33.233 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
Up to 39.962 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature of the preparation Mixture.

The following component(s) are considered hazardous in accordance with paragraph (d) of 29 CFR 1910.1200 [OSHA] or require disclosure as an air contaminant.

Chemical Name	CAS-No	Weight %	Substance Hazard Classification
Carbonic acid, calcium salt (1:1)	471-34-1	10% < x < 20%	29 CFR 1910.1000 Air Contaminant.
Manganese sulfate monohydrate	10034-96-5	3% < x < 5%	29 CFR 1910.1000 Air Contaminant. STOT RE 2. (CNS). (as Mn) See section 8 for OELs.
Silica, amorphous, precipitated and gel	112926-00-8	3% < x < 5%	29 CFR 1910.1000 Air Contaminant. See section 8 for OELs.
Zinc sulfate monohydrate	7446-19-7	3% < x < 5%	Eye Dam. 1. Acute Tox. 4. (oral)
Ferrous sulfate	7720-78-7	1% < x < 3%	Skin Irrit. 2. Eye Irrit. 2. Acute Tox. 4. (oral) See section 8 for OELs.
Zinc oxide	1314-13-2	1% < x < 3%	29 CFR 1910.1000 Air Contaminant. See section 8 for OELs.
Zinc equivalence	7440-66-6	1% < x < 3%	Pyr. Sol. 1.
Manganese	7439-96-5	1% < x < 3%	29 CFR 1910.1000 Air Contaminant. STOT RE 2. (CNS). See section 8 for OELs.
Manganese equivalence	7439-96-5	1% < x < 3%	29 CFR 1910.1000 Air Contaminant. STOT RE 2. (CNS). See section 8 for OELs.
Silica-crystalline, quartz	14808-60-7	< 1.0%	Carc. 1A. Acute Tox. 4. (oral) 29 CFR 1910.1000 Air Contaminant.

Components which are not considered to be health hazards under paragraph (d) of 29 CFR §1910.1200 (HCS 2012) or SOR/2015-17 (WHMIS 2015) are not required to be disclosed. Components may be present which contribute to a potential combustible dust hazard, but are not disclosed since they do not pose health hazards. If additional composition information is needed, please consult with your ADM sales or technical contact. Where a single SDS is used for similar mixtures or in cases of a batch-to-batch variability, OSHA guidance allows for the use of concentration ranges. [Directive: CPL 02-02-079]

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.

Skin Contact Wash off with warm water and soap.

Inhalation Move to fresh air.

Ingestion Clean mouth with water and afterwards drink plenty of water. If ingested in large amounts, seek medical attention.

General Advice When symptoms persist or in all cases of doubt seek medical advice. Contains processed grain by-products, which may include peanut and wheat. Contains plant protein products, which may include peanut, soy, and tree nuts. Contains forage products, which may include soy. Show this safety data sheet to the doctor in attendance.

Most important symptoms and affects, both acute and delayed

Eyes Contact with eyes may cause mechanical irritation. Contact with eyes may cause severe irritation or damage.

Skin Product dust may cause mild, mechanical irritation. Repeated exposure may cause skin dryness or cracking.

Inhalation Dust may cause irritation of respiratory tract. Repeated, excessive inhalation of crystalline silica may result in silicosis. While essential minerals are safe in at low concentrations, chronic, excessive oral exposure or inhalation of manganese may produce manganism and lead to disorders of the central nervous system (CNS).

Ingestion Health injuries are not known or expected under normal use. The product is not expected to produce ill effects when blended into animal feed in the recommended quantities. Manganese dust may be absorbed through the digestive tract. Ingestion of ferrous sulfate in significant amounts may result in abdominal pain, diarrhea, vomiting, and possible liver damage. Zinc is an essential trace mineral, which is needed to sustain normal metabolic functions. Zinc is not bioaccumulative, and is readily cleared and excreted. As with any zinc compound, ingestion (or inhalation) of large amounts can trigger symptoms of acute zinc toxicity. Ingestion of zinc sulfate in significant amounts may result in burning pain in mouth and throat, fever, nausea, abdominal pain, vomiting, diarrhea, prostration, tenemus, retching, hyperglycemia, anuria, liver damage, kidney damage with albuminuria, acetonuria, and glycosuria, hypertension, collapse, and convulsion.

Main Symptoms Repeated or prolonged exposure may cause irritation of eyes and skin. Shortness of breath. Early symptoms of manganese toxicity include sluggishness, sleepiness, and weakness in legs.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Special forms of treatment and immediate medical attention are not specified. Treat Symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties

As with most organic solids, combustion is possible at elevated temperatures or by contact with an ignition source. Fine dust dispersed in air may ignite. Risk of ignition followed by flame propagation or secondary explosions should be prevented by avoiding accumulation of dust, e.g. on floors and ledges.

Extinguishing media

Suitable Extinguishing Media Water. Foam. Carbon dioxide (CO₂) Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None known.

Special hazards arising from the substance or mixture

Hazardous Combustion Products Carbon oxides, Oxides of manganese, Nitrogen oxides (NO_x), Acrolein, Sulphur oxides, Oxides of zinc.

Specific Hazards Arising from the Chemical None known.

Sensitivity to mechanical impact No information available.

Sensitivity to static discharge Yes. (as dust).

Advice for fire-fighters

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health 3
Flammability 1

Stability and Reactivity 0
Physical hazard None known



6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use appropriate personal protective equipment. Avoid dust formation and accumulation. Avoid contact with the skin and the eyes.

Environmental Precautions

Prevent further leakage or spillage if safe to do so.

Methods and Materials for Containment and Cleaning Up

Sweep up or vacuum up using spark-free earthed vacuum cleaner.

7. HANDLING AND STORAGE

Handling

Ensure adequate ventilation. Avoid dust formation in confined areas. Fine dust dispersed in air may ignite. Keep away from open flames, hot surfaces and sources of ignition. Refer to NFPA 61, "Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities". Avoid contact with skin and eyes.

Storage

Store in a cool, dry, hygienic situation, whether in bulk silos, tote bags or paper sacks. Keep containers dry and tightly closed to avoid moisture absorption and contamination.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Where exposure limits have not been established for specific components of this material, please observe the OSHA and ACGIH established limits for particulates not otherwise classified (PNOC). OSHA PEL: [15 mg/m³ (total dust) 8-hr TWA], [5 mg/m³ (respirable) 8-hr TWA]. ACGIH TLV: [10 mg/m³ (inhalable) 8-hr TWA], [3 mg/m³ (respirable) 8-hr TWA].

Chemical Name	Weight %	ACGIH TLV	OSHA PEL	NIOSH
Carbonic acid, calcium salt (1:1)	10% < x < 20%		TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust
Manganese sulfate monohydrate	3% < x < 5%			IDLH: 500 mg/m ³ STEL: 3 mg/m ³ Mn TWA: 1 mg/m ³ Mn
Silica, amorphous, precipitated and gel	3% < x < 5%		20 mppcf TWA (80)/(%)SiO ₂ mg/m ³ TWA	3000 mg/m ³
Ferrous sulfate	1% < x < 3%	TWA: 1 mg/m ³ Fe		TWA: 1 mg/m ³ Fe
Zinc oxide	1% < x < 3%	STEL: 10 mg/m ³ respirable fraction TWA: 2 mg/m ³ respirable fraction	TWA: 5 mg/m ³ fume TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction	IDLH: 500 mg/m ³ STEL: 10 mg/m ³ fume TWA: 5 mg/m ³ dust and fume
Manganese	1% < x < 3%	TWA: 0.2 mg/m ³	Ceiling: 5 mg/m ³ fume	IDLH: 500 mg/m ³ STEL: 3 mg/m ³ TWA: 1 mg/m ³ fume
Manganese equivalence	1% < x < 3%	TWA: 0.02 mg/m ³ (respirable fraction) 0.1 mg/m ³ (inhalable fraction)	Ceiling: 5 mg/m ³ (fume)	IDLH: 500 mg/m ³ STEL: 3 mg/m ³ TWA: 1 mg/m ³ (fume)
Silica-crystalline, quartz	< 1.0%	TWA: 0.025 mg/m ³ respirable fraction	(30)/(%)SiO ₂ + 2 mg/m ³ TWA total dust (250)/(%)SiO ₂ + 5 mppcf TWA respirable fraction (10)/(%)SiO ₂ + 2 mg/m ³ TWA respirable fraction	IDLH: 50 mg/m ³ TWA: 0.05 mg/m ³ respirable dust

Appropriate Engineering Controls

Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits. However it is the duty of the user to verify this and follow given exposure limits at the workplace. Ensure that eyewash stations and safety showers are close to the workstation location. A system of local and/or general exhaust is recommended to keep employee exposures below the airborne exposure limits.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

Personal Protective Equipment

Eye/face Protection.

If exposed to airborne dust, safety goggles are recommended. Tightly fitting safety goggles.

Skin and Body Protection

Also take into consideration the specific local conditions under which the product is used.

Long sleeved clothing and protective gloves are recommended.

Respiratory Protection

If exposed to airborne dust, use appropriate NIOSH approved (or equivalent) respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Appropriate respiratory protection should be selected by a qualified person and should be based upon a risk assessment of the work activities and exposure levels.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Tan
Physical State	Solid
Odor	No information available
Odor Threshold	No information available
pH	No information available
Flash Point	Not applicable (solid)
Autoignition Temperature	No information available
Boiling point	Not applicable (solid)
Melting/Freezing Point	No information available
Decomposition temperature	No information available
Oxidizing Properties	No information available
Flammability Limits in Air	No information available
Solubility(ies)	No information available
Evaporation Rate	Not applicable (solid)
Vapor Pressure	Not applicable (solid)
Vapor Density	Not applicable (solid)
Relative Density	No information available
Viscosity (kinematic)	No information available
Partition Coefficient (n-octanol/water)	No information available

10. STABILITY AND REACTIVITY

Reactivity Stable under recommended use and storage conditions.

Stability Stable under normal conditions.

Possibility of Hazardous Reactions None under normal processing.

Conditions to Avoid Heat, flames and sparks. Avoid dust formation.

Incompatible Materials No materials to be especially mentioned. Calcium hypochlorite. Fluorine.

Hazardous Decomposition Products Thermal decomposition may lead to release of, Carbon oxides, Oxides of manganese, Nitrogen oxides (NOx), Acrolein, Oxides of sulfur, Oxides of zinc.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity	Based on available data, no evidence of acute toxicity. (Classification is based on available literature data for the significant mixture components). The product is not expected to produce ill effects when blended into animal feed in the recommended quantities.				
Skin corrosion/irritation	Based on available data, not, or only slightly irritating. (Classification is based on available literature data for the significant mixture components).				
Serious eye damage/eye irritation	Eye Dam. Cat. 1: Causes serious eye damage. (Classification is based on available literature data for the significant mixture components).				
Respiratory or skin sensitisation	Not expected to be a skin or respiratory sensitizer. (Classification is based on available literature data for the significant mixture components).				
Germ cell mutagenicity	Not classified. Not expected to be mutagenic. None of the significant input ingredients of this mixture have been identified as being mutagenic.				
Carcinogenicity	Carcinogen, Cat. 1: May cause cancer. Contains > 0.1% of a category 1 carcinogen. This product contains >= 0.1% crystalline silica which is listed as a Group 1 carcinogen by IARC, a known carcinogen by NTP and OSHA, and as a suspected human carcinogen (A2) by ACGIH.				
Chemical Name	Weight %	OSHA	NTP	ACGIH	IARC
Silica-crystalline, quartz	< 1.0%	Present	Known	A2 - Suspected Human Carcinogen	Group 1 - Carcinogenic to Humans
Reproductive toxicity	Not classified. Not expected to be toxic to reproduction. None of the significant input ingredients of this mixture have been identified as being toxic to reproduction. Reproductive effects have been reported in animals for zinc sulfate (anhydrous). Data is inconclusive for classification purposes.				
STOT - single exposure	Not classified. No evidence of toxicity. None of the significant input ingredients of this mixture have been identified as a STOT SE hazard.				
STOT - repeated exposure	STOT RE, Cat. 2: May cause damage to organs through prolonged or repeated exposure. (Classification is based on available literature data for the significant mixture components). While essential minerals are safe in at low concentrations, chronic, excessive oral exposure or inhalation of manganese may produce manganism and lead to disorders of the central nervous system (CNS).				
Aspiration hazard	Based on available data, no known aspiration hazard. (Classification is based on available literature data for the significant mixture components).				

Potential health effects**Eyes**

Contact with eyes may cause mechanical irritation. Contact with eyes may cause severe irritation or damage.

Skin

Product dust may cause mild, mechanical irritation. Repeated exposure may cause skin dryness or cracking.

Inhalation

Dust may cause irritation of respiratory tract. Repeated, excessive inhalation of crystalline silica may result in silicosis. While essential minerals are safe in at low concentrations, chronic, excessive oral exposure or inhalation of manganese may produce manganism and lead to disorders of the central nervous system (CNS).

Ingestion

Health injuries are not known or expected under normal use. The product is not expected to produce ill effects when blended into animal feed in the recommended quantities. Manganese dust may be absorbed through the digestive tract. Ingestion of ferrous sulfate in significant amounts may result in abdominal pain, diarrhea, vomiting, and possible liver damage. Zinc is an essential trace mineral, which is needed to sustain normal metabolic functions. Zinc is not bioaccumulative, and is readily cleared and excreted. As with any zinc compound, ingestion (or inhalation) of large amounts can trigger symptoms of acute zinc toxicity. Ingestion of zinc sulfate in significant amounts may result in burning pain in mouth and throat, fever, nausea, abdominal pain, vomiting, diarrhea, prostration, tenemus, retching, hyperglycemia, anuria, liver damage, kidney damage with albuminuria, acetonuria, and glycosuria, hypertension, collapse, and convulsion.

Main Symptoms

Repeated or prolonged exposure may cause irritation of eyes and skin. Shortness of breath. Early symptoms of manganese toxicity include sluggishness, sleepiness, and weakness in legs.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Not classified for aquatic toxicity. This product has not been evaluated for eco-toxicological effects. Component-level values are listed below.

Chemical Name	Weight %	Fresh Water Algae	Acute Fish Toxicity	Daphnia (Water flea)
Sodium bicarbonate	5% < x < 10%	EC50: 120h 650 mg/L (Nitzschia linearis)	LC50: 96h 8250-9000mg/L (Lepomis macrochirus) static	EC50: 48h 2350 mg/L (Daphnia magna)
Silica, amorphous, precipitated and gel	3% < x < 5%	EC50: 72h 440 mg/L (Pseudokirchneriella subcapitata)	LC50: 96h 5000mg/L (Brachydanio rerio) IUCLID	EC50: 48h 7600 mg/L
Zinc sulfate monohydrate	3% < x < 5%	EC50: 72h 0.056 mg/L (Pseudokirchneriella subcapitata) EC50: 96h 2.4 mg/L (Chlorella vulgaris) EC50: 72h 64.8 mg/L (Chlorella vulgaris)		EC50: 48h 0.538 - 0.908 mg/L (Daphnia magna) EC50: 48h 0.75 mg/L (Daphnia magna)
Ferrous sulfate	1% < x < 3%		LC50: 96h 0.56mg/L (Cyprinus carpio) semi-static LC50: 96h 925mg/L (Poecilia reticulata) static	EC50: 48h 6.15 - 9.26 mg/L (Daphnia magna) EC50: 48h 152 mg/L (Daphnia magna)
Zinc equivalence	1% < x < 3%	EC50: 96h 0.11 - 0.271 mg/L (Pseudokirchneriella subcapitata) EC50: 72h 0.09 - 0.125 mg/L (Pseudokirchneriella subcapitata)	LC50: 96h 2.16 - 3.05mg/L (Pimephales promelas) flow-through LC50: 96h 0.211 - 0.269mg/L (Pimephales promelas) semi-static LC50: 96h 2.66mg/L (Pimephales promelas) static LC50: 96h 30mg/L (Cyprinus carpio) LC50: 96h 0.45mg/L (Cyprinus carpio) semi-static LC50: 96h 7.8mg/L (Cyprinus carpio) static LC50: 96h 3.5mg/L (Lepomis macrochirus) static LC50: 96h 0.24mg/L (Oncorhynchus mykiss) flow-through LC50: 96h 0.59mg/L (Oncorhynchus mykiss) semi-static LC50: 96h 0.41mg/L (Oncorhynchus mykiss) static	EC50: 48h 0.139 - 0.908 mg/L (Daphnia magna)
White mineral oil	1% < x < 3%		LC50: 96h 10000mg/L (Lepomis macrochirus)	

13. DISPOSAL CONSIDERATIONS

Whenever possible, as rules and regulations allow, please recycle or manage materials to minimize waste.

Waste Disposal Methods Dispose of in compliance with the laws and regulations pertaining to this product in your jurisdiction.

Contaminated Packaging Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

Domestic transport regulations (USA)

DOT Not regulated.

15. REGULATORY INFORMATION

International Inventories

As animal feed, this product is exempted from the following inventories: U.S.A. (TSCA).

USA**Federal Regulations****SARA 311/312 Hazardous Categorization**

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes (when in the form of combustible dust)
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical, chemicals, or chemical category (typically, metals) which are subject to the reporting requirements of the Act and Title 40 CFR 372. In order to comply with SARA 313, Emission Reporting, facilities are required to complete a Toxic Chemical Release Inventory Form (Form R) for specified chemicals. In order to comply with SARA 313, Emission Reporting, facilities are required to complete a Toxic Chemical Release Inventory Form (Form R) for specified chemicals.

Chemical Name	CAS-No	Weight %	SARA 313 - Disclosure Trigger
Manganese sulfate monohydrate	10034-96-5	3% < x < 5%	1.0 % de minimis concentration
Zinc sulfate monohydrate	7446-19-7	3% < x < 5%	1.0 % de minimis concentration
Zinc oxide	1314-13-2	1% < x < 3%	1.0 % de minimis concentration
Zinc equivalence	7440-66-6	1% < x < 3%	1.0 % de minimis concentration
Manganese	7439-96-5	1% < x < 3%	1.0 % de minimis concentration
Manganese equivalence	7439-96-5	1% < x < 3%	1.0 % de minimis concentration

CERCLA/SARA 103-302

Sections 103-302 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (CERCLA/SARA). This product is not known to contain chemicals at levels which are expected to be subject to the reporting requirements of the Act or regulations contained in 40 CFR 103-302.

State Regulations**State Right-to-Know**

This product may contain one or more ingredient(s) which are subject to state right to know laws. Please contact your sales representative for ingredient details if needed.

16. OTHER INFORMATION

Prepared By: ADM Animal Nutrition™
 Revision Date: 25-Jul-2016
 Revision Number: 1.06
 Reason for revision: Implementation into software system.

Literature References:

When available, hazard classifications for unreacted ingredients are obtained from supplier Safety Data Sheets.

Additional literature sources may include:

- CSST Répertoire toxicologique: 2015 WHMIS classification of chemical substances (<http://www.cssst.qc.ca/en/prevention/reptox/Pages/list-whmis-2015-a.aspx>)
- European Chemicals Agency (<http://echa.europa.eu>)
- International Programme on Chemical Safety (IPCS) INCHEM website, which is provided in cooperation with the Canadian Centre for Occupational Health and Safety (CCOHS) (<http://www.inchem.org>)
- TOXNET HSDB: a database of the National Library of Medicine's TOXNET system (<http://toxnet.nlm.nih.gov>)

Abbreviations and acronyms

A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen
ACGIH TLV - American Conference of Governmental Industrial Hygienists Threshold Limit Values
CAS - Chemical Abstract Service
Ceiling - Ceiling Limit Value: Concentrations that should never be exceeded at any given time (instantaneous)
Delisted - Substances Delisted from Report on Carcinogens
DNEL - Derived No Effect Level
DOT - U.S. Department of Transportation
GHS - Globally Harmonized System of Classification and Labelling of Chemicals
Group 1 - Carcinogenic to Humans
Group 2A - Probably Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans
IARC - International Agency for Research on Cancer
IDLH - Immediately Dangerous to Life or Health
Known - Known Carcinogen
LC50 - Lethal concentration that produces fatalities in 50% of a given test population
LD50 - Median lethal dose of a given test population
NFPA - National Fire Protection Association
NIOSH - National Institute of Occupational Safety and Health
NOAEL - No Observed Adverse Effect Level
NTP - National Toxicology Program
OECD - Organisation for Economic Co-operation and Development
OSHA - Occupational Safety & Health Administration
OSHA PEL - Occupational Safety and Health Administration Permissible Exposure Limits
PNEC - Predicted No-Effect Concentration
Present - Carcinogen or potential carcinogen to be identified under OSHA's Hazard Communication Standard
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
Skin notation - Potential for cutaneous absorption
STEL - Short Term Exposure Limit: Concentrations that should not be exceeded except for short periods of time (usually 15-minutes)
STOT - Specific Target Organ Toxicity
STV - Short Term Value (same as STEL)
TSCA - Toxic Substances Control Act, Section 8(b) Inventory (USA)
TWA - Time Weighted Average: Average concentration that should not be exceeded during a work day (usually 8-hours)
Under Consideration - Under Consideration by the National Toxicology Program

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of sheet

EGGLAND'S BEST[®] BIOTENE[®] T/PHYTASE w/o CC w/ Pigmenter FEED SUPPLEMENT FOR LAYERS

A Vitamin and Mineral Supplement for layers, with added phytase to increase digestibility of phytin-bound phosphorus. For the further manufacture of layer feed.

GUARANTEED ANALYSIS

Crude Protein (Min.)	4.00%
Crude Fat (Min.)	0.90%
Crude Fiber (Max.)	12.0%
Selenium (Min.)	48 ppm (Max)
Manganese (Min.)	50.0 ppm
Zinc (Min.)	2.40%
Phytase (Trichoderma reesei) (Min.)	2.40%
	90 FTU*/g

INGREDIENTS

Roughage Products, Forage Products, Dehydrated Kelp, Calcium Carbonate, Vitamin E Supplement, Extracted Citric Acid Presscake, Sodium Bicarbonate, Marigold Extract, Rice Bran, , Zinc Sulfate, Ferrous Sulfate, Manganese Hydroxychloride, Zinc Hydroxychloride, Manganese Sulfate, Manganous Oxide, Zinc Oxide, Mineral Oil, Selenium Yeast, Dried Trichoderma reesei Fermentation Product, Niacin Supplement, Lactobacillus Acidophilus Fermentation Product Dehydrated, Lactobacillus Casei Fermentation Product Dehydrated, Bifidobacterium Thermophilum Fermentation Product Dehydrated, Enterococcus Faecium Fermentation Product Dehydrated, Calcium Pantothenate, Basic Copper Chloride, Vitamin D₃ Supplement, Red Pepper Meal Extract (color), Copper Sulfate, Ethoxyquin (a preservative), Vitamin A Supplement, Menadione Sodium Bisulfite Complex, Riboflavin Supplement, Vitamin B₁₂ Supplement, Red 40, Pyridoxine Hydrochloride, Propionic Acid (a preservative), Sodium Hydroxide, Calcium Hydroxide, Amorphous Silicon Dioxide, Sorbic Acid - Benzoic Acid - Propylparaben - Methylparaben - Butylated Hydroxyanisole (as preservatives), Biotin, Thiamine Mononitrate, Folic Acid, Ethylenediamine Dihydriodide.

DIRECTIONS FOR USE

BIOTENE T/P w/o CC w/ Pigmenter is designed to be used at the rate of 10, 11, or 12 pounds per ton of feed for layers. **BIOTENE T/P w/o CC w/ Pigmenter** contains all the vitamins and trace minerals, except Choline required for Egglan's Best egg production.

For use only in the manufacture of Egglan's Best Feeds according to their authorized formulas.

WARNING: Contains a high level of copper. Do not feed to sheep.

CAUTION: Follow label directions. The addition to feed of higher levels of this premix containing selenium is not permitted.

*One unit of phytase (FTU) is defined as the quantity of enzyme which liberates 1 micromol of inorganic phosphorus per minute from 0.0051 MOL/L of sodium phytate at pH 5.5 and 37°C.

Manufactured for
EGGLAND'S BEST, LLC
Malvern, PA 19355

Manufactured and Guaranteed by
ADM Animal Nutrition, a division of
Archer Daniels Midland Company, Quincy, IL 62305-3115

NET WEIGHT 50 POUNDS (22.67 kg)

Biotene Registered Trademark of Egglan's Best