

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1. Product Identifier
 Product Name Axta[®] PHY 10000 TPT2
 Product Code A14098
 Pure substance/mixture Mixture
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
 Recommended Use Animal feed
- 1.3. Details of the supplier of the safety data sheet
 Danisco Animal Nutrition
 PO Box 777
 Mariborough
 Wiltshire SN81XN
 United Kingdom
 Tel: +441672 517777.
- E-mail address
 SDS.Genencor@DuPont.com
- 1.4. Emergency telephone number
 +32 (0) 50 44 91 73

Section 2: HAZARDS IDENTIFICATION

- 2.1. Classification of the substance or mixture
 Regulation (EC) No 1272/2008
 Respiratory sensitisation

Category 1 - (H334)

- 2.2. Label elements
 Contains: Phytase



Signal word
 DANGER

Hazard statements
 H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary Statements

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
 P284 - In case of inadequate ventilation wear respiratory protection
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
 P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

- 2.3. Other hazards
 None known

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Issuing Date 26/02/2016
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Axtra® PHY 10000 TPT2

Chemical Name	CAS No	%	EC No	REACH Reg. No	CLP Classification
Calcium carbonate	471-34-1	47-52	-	No data available	-
Talc	14807-90-6	1-5	238-877-9	No data available	-
Phytase	9001-89-2	1-5	Na	-	Resp. Sens. 1 (H334)

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Skin Contact: IF ON SKIN: Wash with plenty of water and soap. If skin irritation occurs: Get medical advice/ attention.

Eye Contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion Rinse mouth thoroughly with water. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

4.3. Indication of any immediate medical attention and special treatment needed
 Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media
 Extinguish with alcohol-resistant foam, fire extinguishing powder or water spray.

5.2. Special hazards arising from the substance or mixture
 None known

5.3. Advice for firefighters
 Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
 Avoid generation of dust and aerosols. Avoid breathing dust or spray mist.

6.2. Environmental precautions
 Contain spill.

6.3. Methods and material for containment and cleaning up
Methods for Containment Cover with absorbent or contain. Collect and dispose.
Methods for Cleaning Up Use appropriate personal protective equipment (PPE). Contain and/or absorb spill with inert

Axtra® PHY 10000 TPT2

material, then place in suitable container. Prevent runoff from entering drains, sewers or waterways.

6.4. Reference to other sections
Use personal protection recommended in Section 8.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid generation of dust and aerosols. Ensure adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid breathing dust or spray mist. Wear suitable gloves and eye/face protection.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin and clothing. Regular cleaning of equipment, work area and clothing is recommended.

7.2. Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Protect from light. Keep/store only in original container.

7.3. Specific end use(s)
See section 1 for more information.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Based on data available for ingredients.

Chemical Name	EU	UK WEL	France	Spain	German MAK:
Talc	None known	3 mg/m ³ STEL (calculated, respirable dust) 1 mg/m ³ respirable dust	None known	TWA: 2 mg/m ³	Category 3B
Calcium carbonate	None known	None known	TWA: 10 mg/m ³	None known	None known

Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
Talc	None known	TWA: 2 mg/m ³	TWA: 0.25 mg/m ³	TWA: 0.5 fiber/cm ³ STEL: 2 ppm STEL: 1 ppm	TWA: 0.3 fiber/cm ³
Calcium carbonate	None known	TWA: 10 mg/m ³	None known	None known	None known

Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Talc	TWA: 2 mg/m ³	TWA: 2 mg/m ³	TWA: 4.0 mg/m ³ TWA: 1.0 mg/m ³	TWA: 6 mg/m ³ TWA: 2 mg/m ³	TWA: 10 mg/m ³ TWA: 0.8 mg/m ³ STEL: 30 mg/m ³ STEL: 2.4 mg/m ³
Calcium carbonate	None known	TWA: 3 mg/m ³	TWA: 10 mg/m ³	None known	None known

DNEL/DMEL - Workers
Derived minimal effect level (DMEL) of 60 ng/m³ for workers and 15 ng/m³ for consumers has been derived for enzyme proteins.

DNEL/DMEL - General population
Derived minimal effect level (DMEL) of 60 ng/m³ for workers and 15 ng/m³ for consumers has been derived for enzyme proteins.

Predicted No Effect Concentration (PNEC)
No data available

8.2. Exposure controls

Issuing Date 26/02/2016
Revision Date 26/02/2016

Axtra® PHY 10000 TPT2

Engineering Measures	Transfer via enclosed lines. Formulate in enclosed or ventilated mixing vessels. Carefully handle the substance to minimise releases. Avoid generation of dust and aerosols.
Personal protective equipment	Wear safety glasses with side shields (or goggles). Use any protective gloves that meet the minimum requirements of EN420 when handling solid product. Gloves meeting the additional requirements of EN374-2 should be worn when handling liquid products. Practical experience has shown that gloves of nitrile rubber, butyl rubber, latex, and polyvinyl chloride (PVC) offer sufficient protection. There are no additional material, thickness and breakthrough time requirements. Chemical resistant gloves, as defined by EN374-3 are not required. Wear protective gloves and protective clothing. Ensure adequate ventilation. If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. Respirators with a particle filter (EN143) or P3 filters are recommended.
Eye/Face Protection	
Hand Protection	
Skin and Body Protection	
Respiratory Protection	

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Granules
Physical State	Off-white to Light Tan
Colour	Odourless
Odour	No data available
Odour Threshold	No data available
pH	No data available
Melting point / freezing point	No data available
Boiling point / boiling range	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Upper explosive limits	No data available
Lower Flammability Limit	No data available
Lower explosive limits	No data available
Vapour Pressure	No data available
Vapour Density	1.0-1.5 kg/l
Relative density	No data available
Specific Gravity	Soluble
Water Solubility	No data available
Partition Coefficient (n-octanol/water)	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No information available
Explosive Properties	No information available
Oxidising Properties	No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity
Not expected.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
None under normal processing.

Axtra® PHY 10000 TPT2

10.4. Conditions to avoid
Avoid dust formation.

10.5. Incompatible materials
None known.

10.6. Hazardous decomposition products
None known.

Section 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Product Information****Acute Toxicity**

Inhalation
Eye Contact
Skin Contact:
Ingestion

No data available.
Not expected to cause eye irritation.
Not expected to cause irritation.
Toxicity: Not expected

Sensitisation

May cause sensitisation in susceptible persons. Repeated inhalation of enzyme containing aerosol (dust or mist) can cause a respiratory allergy in some individuals.

Mutagenic effects
Carcinogenic effects
Reproductive effects
STOT - single exposure
STOT - repeated exposure
Aspiration hazard

No data available.
No data available.
No data available.
No data available.
No data available.
Not expected.

Component Information***Talc***

Eye Irritation
Skin Irritation
Respiratory Irritation
Sensitisation
Reproductive effects
Mutagenic effects

Classification based on data available for ingredients.

May cause slight irritation
May cause slight irritation
May cause slight irritation
Not a skin sensitiser
No Developmental toxicity in rats
Negative in the chromosomal aberration assay. Negative in dominant lethal assay in rat up to 5000 mg/kg. Negative in DNA Damage and Repair Assay. Negative in Ames assay with and without metabolic activation up to 20 mg/plate.

Phytase

Oral
Dermal
Inhalation
Eye irritation
Skin Irritation
Sensitisation

Oral LD50 (rat) > 2000 mg/kg
No information available
LC50/inhalation/4h/rat >4.99 mg/l
Non-irritant

Non-irritating to the skin
Not a skin sensitiser in Mice. May cause sensitisation in susceptible persons. Repeated inhalation of enzyme containing aerosol (dust or mist) can cause a respiratory allergy in some individuals.

Reproductive effects
Mutagenic effects

Developmental toxicity or Reproductive toxicity Not expected.
Negative in Ames assay with and without metabolic activation up to 5000 µg/plate. Negative in chromosome aberration using human lymphocytes with and without metabolic activation up to 5000 µg/ml.

Systemic Toxicity

In a 90-day study in rats, there were no indications of toxicity or other changes attributed to treatment. A NOAEL can be established at 144 mg/kg/d (TOS).

Calcium carbonate
Oral

Oral LD50 (rat) 6450 mg/kg

Issuing Date 26/02/2016
Revision Date 26/02/2016

Axtra® PHY 10000 TPT2

Eye irritation	May cause irritation
Skin irritation	May cause skin irritation
Respiratory irritation	Irritating to respiratory system

The following values are calculated based on chapter 3.1 of the GHS document (ATE)

ATEmix (oral) 12,900.00 mg/kg

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity
Classification based on data available for ingredients.

Contains 0 % of components with unknown hazards to the aquatic environment

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to daphnia
Calcium carbonate 471-34-1	No data	LC50/96hr/Gambusia affinis: 56000 mg/L.	No data
Talc 14807-96-6	No data	Brachydanio rerio LC50 = 100000 mg/L.	No data

12.2. Persistence and degradability
Based on data available for ingredients.

Chemical Name	Biodegradation
Calcium carbonate	No data
Talc	No data

12.3. Bioaccumulative potential
No bioaccumulation potential.

12.4. Mobility in soil
Soluble in water.

12.5. Results of PBT and vPvB assessment
No data available.

12.6. Other adverse effects
None known.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Disposal Methods

Dispose of wastes in an approved waste disposal facility. Dispose of contents/containers in accordance with local regulations.

Contaminated Packaging

Dispose of empty containers and wastes safely. Dispose of waste product or used containers according to local regulations.

Section 14: TRANSPORT INFORMATION

Issuing Date 26/02/2016
Revision Date 26/02/2016

Axtra® PHY 10000 TPT2

IMDG/IMO

14.1 UN-No	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3. Hazard Class	Not regulated
14.4. Packing Group	Not regulated
14.5. Marine Pollutant	None
14.6. Special Provisions	None
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	None

RID

14.1 UN-No	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3. Hazard Class	Not regulated
14.4. Packing Group	Not regulated
14.5. Environmental hazard	None
14.6. Special Provisions	None

ADR:

14.1 UN-No	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3. Hazard Class	Not regulated
14.4. Packing Group	Not regulated
14.5. Environmental hazard	None
14.6. Special Provisions	None

ICAO

14.1 UN-No	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3. Hazard Class	Not regulated
14.4. Packing Group	Not regulated
14.5. Environmental hazard	None
14.6. Special Provisions	None

IATA

14.1 UN-No	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3. Hazard Class	Not regulated
14.4. Packing Group	Not regulated
14.5. Environmental hazard	None
14.6. Special Provisions	None

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Chemical Name	Water hazard class (WGK)	
Phytase	1	
Chemical Name	TA Luft (German Air Pollution Control Regulation)	Occupational illnesses (R-463-3, France)
Talc		RG 25
Phytase		RG 63

15.2. Chemical safety assessment
No information available.

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Axtra® PHY 10000 TPT2

Section 16: OTHER INFORMATION

Full text of H-Statements referred to under section 3
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

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SDS sections updated First edition in this format.

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Disclaimer

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End of Safety Data Sheet