1.1 Product identifier

Trade name

DuraZyme 4HL

1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the substance or mixture Animal Feed Supplement

1.3 Details of the supplier of the safety data sheet

Address

A/B Technologies International, Inc. 402 Shelley Street Springfield, OR 97477 Telephone no. +541-746-8672

Information provided by / telephone +541-746-8672 Department: Dr. Calvin Speckman

Advice on Safety Data Sheet abtusa@abtusa.com

1.4 Emergency telephone number +800-285-6221

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification information

This product does not meet the classification and labelling criteria given in the Dangerous Preparations Directive (1999/45/EC; DPD)

- 2.2 Label elements Not relevant
- 2.3 Other hazards No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Chemical characterization

Fermentation product from lactic acid bacteria with dextrose as carrier.

Hazardous ingredients

This product does not contain substances to be mentioned according to EU Regulation No 1907/2006 (REACH), annex II.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

No special measures necessary.

After inhalation Ensure supply of fresh air. After skin contact In case of contact with skin wash off with warm water. After eye contact Separate eyelids, wash the eyes thoroughly with water (15 min.). In case of irritation consult an ophthalmologist. After ingestion By continuous complaints consult a physician. 4.2 Most important symptoms and effects, both acute and delayed No data available.

4.3 Indication of any immediate medical attention and special treatment needed No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Extinguishing measures to suit surroundings. Foam; Carbon dioxide; extinguishing powder; Water spray jet Unsuitable extinguishing media Full water jet

5.2 Special hazards arising from the substance or mixture

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide, carbon dioxide and smoke.

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Refer to protective measures listed in sections 7 and 8.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up mechanically. When picked up, treat material as prescribed under heading "Disposal considerations".

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

No special measures necessary.

General protective and hygiene measures

Wash hands before breaks and after work. Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages.

Advice on protection against fire and explosion

No special measures necessary.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed in a cool, well-ventilated place.

Requirements for storage rooms and vessels Store product in closed containers.

Advice on storage assembly

None known

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

Substance name	CAS no.		EC no.			
DUST						
List of approved workplace exposure limits (WELs) / EH40						
total inhalable dust						
TWA	10	mg/m³				
List of approved workplace exposure limits (WELs) / EH40						
respirable dust						
TWA	4	mg/m³				
	DUST List of approved workplace exposure limits (WELs) / total inhalable dust TWA List of approved workplace exposure limits (WELs) / respirable dust	DUST List of approved workplace exposure limits (WELs) / EH40 total inhalable dust TWA 10 List of approved workplace exposure limits (WELs) / EH40 respirable dust	DUST List of approved workplace exposure limits (WELs) / EH40 total inhalable dust TWA 10 mg/m³ List of approved workplace exposure limits (WELs) / EH40 respirable dust			

8.2 Exposure controls

Appropriate engineering controls

No data available.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified. Dust mask

Eye / face protection

Safety glasses (EN 166)

Hand protection

In case of intensive contact, wear protective gloves (EN 374). Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Environmental exposure controls No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form/Colour	
Paste	
Light green	
Odor	
odorless	

Odour threshold			
No data available			
pH value			
Reference temperature	20		°C
Concentration Method	10 DIN 53200		g/l
Remarks	neutral		
Boiling point / boiling range No data available			
Melting point / melting range No data available			
Decomposition point / decomposition range			
No data available			
Flash point			
no data available			
Auto-ignition temperature			
No data available			
Oxidising properties			
No data available			
Explosive properties			
No data available			
Flammability (solid, gas)			
No data available			
Lower flammability or explosive limits			
No data available			
Upper flammability or explosive limits			
No data available			
Vapour pressure			
No data available			
Vapour density			
No data available			
Evaporation rate			
No data available			
Relative density			
No data available			
Density			
Value	0.5	50	g/cm³
Solubility in water			
Remarks	not soluble		
Solubility(ies)			
No data available			
Partition coefficient: n-octanol/water			
No data available			
Viscosity			
No data available			
2 Other information			
Other information			
No data available.			

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No data available.
- **10.2 Chemical stability** No data available.
- **10.3 Possibility of hazardous reactions** No data available.
- **10.4 Conditions to avoid** No data available.
- **10.5** Incompatible materials None known.
- **10.6 Hazardous decomposition products** No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity
No data available
Acute dermal toxicity
No data available
Acute inhalational toxicity
No data available
Skin corrosion/irritation
No data available
Serious eye damage/irritation No data available
Respiratory or skin sensitisation
No data available
Germ cell mutagenicity
No data available
Reproduction toxicity
No data available
Carcinogenicity
No data available
STOT-single exposure
No data available
STOT-repeated exposure No data available
Aspiration hazard
No data available
Other information
By appropiate use of the product no health damage is known.

SECTION 12: Ecological information

12.1 Toxicity

Fish toxicity		
No data available		
Daphnia toxicity		
No data available		
Algae toxicity		
No data available		
Bacteria toxicity		
No data available		

12.2 Persistence and degradability

- No data available.
- **12.3 Bioaccumulative potential** No data available.
- **12.4 Mobility in soil** No data available.
- **12.5 Results of PBT and vPvB assessment** No data available.
- **12.6 Other adverse effects** No data available.

12.7 Other information

Other information

Do not discharge into the drains or waters and do not store on public depositories.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

- **14.4 Other information** No data available.
- **14.6** Special precautions for user No data available.
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not relevant

SECTION 15: Regulatory information

- **15.1** Safety, health and environmental regulations/legislation specific for the substance or mixture No data available.
- **15.2 Chemical safety assessment** No data available.

SECTION 16: Other information

Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 99/45/EC as amended in each case.

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EC

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.