Completion Date: 28/05/2013 Revision Date: 13/09/2013

Version Number:



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

SELECT GH®

1.2 Other means of identification Not applicable

1.3 Recommended use of the chemical and restrictions on use

> SELECT GH® contains a source of live (viable) naturally occurring microorganisms for all classes of livestock and poultry feeds.

Details of the supplier of the safety data sheet 1.4

> Alltech, Inc. 3031 Catnip Hill Pike Nicholasville, KY 40356 Phone: 859-885-9613

Fax: 859-887-6736

1.5 Emergency telephone number

> Chem Trec: 1-800-424-9300 24 hours

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Not applicable 2.2 **GHS** Label elements Not applicable

2.3 Other hazards

> Inhalation: Exposure to dust may cause irritation to the nose, throat or respiratory

system. If application creates dust, use appropriate approved respiratory

protection. Persons with allergies should avoid exposure.

Skin Contact: Skin contact may cause a slight irritation. Symptoms may include redness,

itching and pain. Persons with allergies should avoid exposure.

Eye Contact: Product may cause slight irritation. Symptoms include redness, itching and

Ingestion: Not found to be toxic by oral exposure. Ingestion of this product may cause

slight irritation.

Chronic Health

Effects: Not identified.

Completion Date: 28/05/2013 Revision Date: 13/09/2013

Version Number: 2

SECTION 3: Composition/information of ingredients

3.1 Substances Not applicable

3.2 Mixtures

CAS#:	Component	Weight %
NA	Hydrolyzed yeast	Not disclosed
NA	Processed grain by-products	Not disclosed
NA	Hydrated sodium calcium aluminosilicate	Not disclosed
NA	Dried Aspergillus oryzae fermentation extract	Not disclosed
NA	Dried Lactobacillus acidophilus fermentation product	Not disclosed
NA	Dried Lactobacillus casei fermentation product	Not disclosed
NA	Dried Enterococcus faecium fermentation product	Not disclosed
NA	Dried Bifidobacterium longum fermentation product	Not disclosed

NA: Not applicable

SECTION 4: First aid measures

4.1 Description of first aid measures

Eyes: Flush eyes immediately with copious amounts of clean water for 15

minutes. If irritation or redness persists, seek medical attention if allergic

response exhibited.

Skin: Remove affected clothing immediately. Flush affected area(s) with copious

amounts of soap and water. If skin surface is damaged, apply a clean dressing. Wash contaminated clothing before reuse. If irritation or redness

develops, seek medical attention immediately.

Inhalation: Remove victim from source and allow to rest in well ventilated area. If

breathing is difficult, obtain medical attention immediately.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Seek medical

attention.

4.2 Most important symptoms and effects, both acute and delayed Not identified.

4.3 Indication of any immediate medical attention and special treatment needed Not identified.

SECTION 5: Firefighting measures

5.1 Suitable extinguishing media

Use media that is appropriate to treat surrounding fire. Consider alcohol-resistant foam, carbon dioxide, regular dry chemical, or water spray. Avoid heavy stream of water. Self contained breathing apparatus is required.

5.2 Special hazards arising from the substance or mixture

Evolves carbon dioxide, carbon monoxide or hydrocarbon fumes upon combustion.

5.3 Special protective actions for fire-fighters

Move container from fire area if it can be done without risk. Do not scatter spilled material with high pressure water streams. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products.

Completion Date: 28/05/2013 Revision Date: 13/09/2013 Version Number: 2

Version Number: 2

Fire fighters should wear self-contained breathing apparatus with full face piece operated in positive pressure mode and protective clothing to prevent contact with skin and eyes.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ventilate the area. Wear appropriate protective equipment as specified in section 8. Avoid dust formation and avoid inhalation of dust. Use a respirator or a combination filter. Keep unnecessary personnel away.

6.2 Environmental precautions

Place contaminated materials in disposal containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material. Do not dispose in canals, surface water, or ground water.

6.3 Methods and material for containment and cleaning up

Sweep, shovel, or vacuum up the material. Avoid any excess dust formation. Use caution as product may be slippery when wet. Keep product out of sewage and drainage systems and all bodies of water. Clean spills immediately. Ventilate the contaminated area. Thoroughly wash the area with water after a spill.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly with soap and water after handling. The use of respiratory protection is advised when dust concentrations exceed any established exposure limits (see section 8).

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry place. Open containers should be resealed. Shelf life under these conditions is 18 months.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters Not available

Component (CAS#):

8.2 Appropriate engineering controls:

Use process enclosure, general dilution ventilation, or local exhaust systems, where necessary to maintain airborne dust concentrations below the applicable regulations. A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits.

8.3 Individual protection measures

Eye/face: Protective goggles or face shields.

Skin: Wear impervious gloves and general purpose overalls with elasticized

cuffs and leg bottoms. Persons with allergies should avoid exposure.

SELECT GH®

Completion Date: 28/05/2013 Revision Date: 13/09/2013

Version Number:

Respiratory: Protection is not normally required. Wear a dust mask or other appropriate

approved respiratory protection when effective engineering controls are not feasible or during operations that generate airborne dust concentrations exceeding the relevant standards. A respiratory protection program that meets applicable requirements whenever workplace conditions warrant a

respirator's use. Persons with allergies should avoid exposure.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

> (a) Physical appearance Light to medium brown free-flowing

> > powder

Not available

Not available

(b) Odor Not available (c) Odor Threshold Not available 48.98 lb/ft³ (d) Bulk Density Not available (e) pH (f) Melting point/freezing point Not available (g) Initial boiling point Not available (h) Flash point Not available (i) Evaporation rate Not available (j) Flammability Not available (k) Upper/lower flammability or explosive limits Not available (I) Vapour pressure Not available (m) Vapour density Not available (n) Relative density Not available (o) Solubility Not available (p) Partition coefficient: n-octanol/water Not available (q) Auto ignition temperature Not available

9.2 Other information

(s) Viscosity

To the best of our knowledge the chemical, physical, and toxicological properties of this product have not been thoroughly investigated.

SECTION 10: Stability and reactivity

10.1	Reactivity	Not available
10.2	Chemical stability	Product is stable under normal storage conditions (21 °C,
		1atm).
10.3	Possibility of hazardous reactions	Not available

(r) Decomposition temperature

10.4 Conditions to avoid Avoid moisture, heat and sources of ignition.

10.5 Incompatible materials Not available 10.6 Hazardous decomposition products Not available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

> (a) Acute toxicity Not identified

(b) Skin corrosion/irritation Not expected to be toxic. Exposure may cause slight

irritation.

(c) Serious eye damage/irritation Not available

SELECT GH®

Completion Date: 28/05/2013 Revision Date: 13/09/2013

Version Number: 2

(d)	Respiratory or skin sensitization	Not available
(e)	Germ cell mutagenicity	Not available
(f)	Carcinogenicity	Not applicable
	Reproductive toxicity	Not applicable
(h)	STOT-single exposure	Not applicable
(i)	STOT-repeated exposure	Not applicable
(j)	Aspiration hazard	Not applicable

11.2 Information on the likely routes of exposure

Not applicable

- 11.3 Symptoms related to the physical, chemical and toxicological characteristics Not applicable
- 11.4 Delayed and immediate effects and also chronic effects from short and long term exposure Not applicable
- 11.5 Other information

Other toxicological information: To the best of our knowledge the chemical, physical and toxicological properties of this product have not been thoroughly investigated.

SECTION 12: Ecological information

12.1	Toxicity	Not available
16.1	IONICILY	INULAVAIIADIE

Component (CAS#:)
Test & Species:

12.2	Persistence and degradability	Not available
12.3	Bioaccumulative potential	Not available
12.4	Mobility in soil	Not available
12.6	Other adverse effects	Not available

SECTION 13: Disposal considerations

13.1 Waste treatment methods Not identified

Disposal Instructions: Consult local, state and/or provincial environmental regulatory authorities for acceptable disposal procedures and locations. Follow standard disposal procedures in accordance with Directive 2008/98/EC of the European Parliament and of the Council of the Member State.

SECTION 14: Transport information

UN number	Not applicable
UN proper shipping name	Not applicable
Transport hazard class(es)	Not applicable
Packing group	Not applicable
Environmental hazards	Not applicable
Special precautions for user	Not applicable
	UN proper shipping name Transport hazard class(es) Packing group Environmental hazards

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable

SELECT GH®

Completion Date: 28/05/2013 Revision Date: 13/09/2013

Version Number:

SECTION 15: Regulatory information

15.1 Safety, health, and environmental regulation/legislation specific for the substance or mixture Not available

SECTION 16: Other information

H Phrases: None listed P Phrases: None listed

Preparation Date: 13 September 2013 Issue Date: 13 September 2013 Previous Issue Date: 28 May 2013

The information herein has been compiled from sources believed to be reliable and is accurate to the best of our knowledge. However, Alltech, Inc. cannot give any guarantees regarding information from other sources, and expressly does not make any warranties, nor assumes any liability, for its use.