



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Hemicell HT 1.5X Feed Enzyme for Poultry and Swine

**Other means of identification**

**Item Code** AG3312

**Synonyms** Hemicell-HT 1.5X \* Hemicell-HT Feed Enzyme for Poultry and Swine \* Hemicell HT-D 1.5X

**Recommended use** Feed Enzyme; zootechnical feed additive.

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company Name** Elanco Animal Health  
2500 Innovation Way  
Greenfield, IN 46140  
US

**Phone:** 1-877-Elanco1 (1-877-352-6261)

**Email:** lilly\_msds@lilly.com

**Emergency Telephone Numbers:** Elanco Product Technical Support / Human or Animal Exposure Reporting: 1-888-545-5973  
Transportation Emergency Telephone: CHEMTREC: 1-800-424-9300 (Outside U.S. 1-703-527-3887)

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards**

Serious eye damage/eye irritation	Category 2B
Sensitization, respiratory	Category 1
Sensitization, skin	Category 1

**OSHA defined hazards** Combustible dust

**Label elements**



**Signal word** Danger

### Hazard statement

H317 May form combustible dust concentrations in air.  
H320 May cause an allergic skin reaction.  
H334 Causes eye irritation.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

### Precautionary statement

#### Prevention

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P285 In case of inadequate ventilation wear respiratory protection.

#### Response

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.

**Storage** Not available.

**Disposal**

P501

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)**

None known.

**Supplemental information**

None.

**3. Composition/information on ingredients****Mixtures**

Chemical name	Common name and synonyms	CAS number	%
Dried Bacillus lentus fermentation solubles (beta-D-mannanase)		37288-54-3	3
Linseed Meal Solvent Extracted		N/A	58
Mineral Oil, technical grade white oil	MINERAL OIL	8012-95-1	1
Other components below reportable levels			38

**Composition comments**

Remaining components of this product are non-hazardous and/or are present at concentrations below reportable levels.

**4. First-aid measures****Inhalation**

If experiencing respiratory symptoms: Get medical attention.

**Skin contact**

Immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.

**Eye contact**

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

**Ingestion**

Give several glasses of water. Never give anything by mouth to a victim who is unconscious or is having convulsions. Call a physician or poison control center immediately.

**Most important symptoms/effects, acute and delayed**

Eye irritation. May cause allergic respiratory and skin reactions.

**General information**

In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**5. Fire-fighting measures****Suitable extinguishing media**

Water. Carbon dioxide (CO2). Dry chemical.

**Unsuitable extinguishing media**

None known.

**Specific hazards arising from the chemical**

Hazardous decomposition products formed under fire conditions.

**Special protective equipment and precautions for firefighters**

Wear self-contained breathing apparatus and protective clothing.

**General fire hazards**

Dust may form explosive mixture with air.

**6. Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear suitable protective clothing, gloves and eye/face protection. Avoid inhalation of dust. See Section 8 of the SDS for Personal Protective Equipment.

**Methods and materials for containment and cleaning up**

Small Spillages:

Do not sweep. Vacuum material with appropriate dust collection filter in place. Be aware of potential for dust explosion when using electrical equipment. If vacuum is not available, lightly mist/wet material and remove by mopping or wet wiping.

Large Spillages:

Prevent further migration into the environment. Remove sources of ignition. Collect in a non-combustible container for prompt disposal. Local authorities should be advised if significant spillages cannot be contained.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent spilled material from flowing onto adjacent land or into streams, ponds, or lakes.

## 7. Handling and storage

**Precautions for safe handling** Minimize dust generation and accumulation. Keep away from heat and sources of ignition. Avoid release to the environment.

**Conditions for safe storage, including any incompatibilities** Keep container tightly closed. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures. Keep away from moisture. Avoid contact with oxidizing agents. Do not store in open or unlabelled containers.

## 8. Exposure controls/personal protection

**Exposure guidelines** Lilly Interim Exposure Guideline: <100 micrograms/m<sup>3</sup> TWA 12 hour (beta-D-mannanase)

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Mineral Oil, technical grade white oil (CAS 8012-95-1)	TWA	5 mg/m <sup>3</sup>	Inhalable fraction.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Mineral Oil, technical grade white oil (CAS 8012-95-1)	PEL	5 mg/m <sup>3</sup>	Mist.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Mineral Oil, technical grade white oil (CAS 8012-95-1)	STEL	10 mg/m <sup>3</sup>	Mist.
	TWA	5 mg/m <sup>3</sup>	Mist.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** Laboratory fume hood or local exhaust ventilation.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear goggles/face shield.

#### Skin protection

**Hand protection** Chemical-resistant gloves and impermeable body covering to minimize skin contact.

**Other** Chemical-resistant gloves and impermeable body covering to minimize skin contact.

**Respiratory protection** In case of inadequate ventilation, use respiratory protection. Select appropriate respirator for physical characteristics of material. Select respirator with appropriate protection factor.

**Thermal hazards** Not available.

**General hygiene considerations** In a manufacturing setting, wear chemical-resistant gloves and body covering to minimize skin contact. If handled in a ventilated enclosure, as in a laboratory setting, respirator and goggles or face shield may not be required. Safety glasses are always required.

Under normal use and handling conditions, wear goggles to protect eyes and wear impermeable gloves and protective equipment to avoid direct contact with skin. Wash thoroughly with soap and water after handling.

## 9. Physical and chemical properties

### Appearance

**Physical state** Solid.

**Form** Solid.

**Color** Light brown.

**Odor** Plant meal

**Odor threshold** No data available.

**pH** No data available.

**Melting point/freezing point** No data available.

**Initial boiling point and boiling range** No data available.

Material name: Hemicell HT 1.5X Feed Enzyme for Poultry and Swine

4999 Version #: 01 Issue date: 11-14-2014

Flash point No data available.  
 Evaporation rate No data available.  
 Flammability (solid, gas) No test data available.  
**Upper/lower flammability or explosive limits**  
 Flammability limit - lower (%) No data available.  
 Flammability limit - upper (%) No data available.  
 Explosive limit - lower (%) No data available.  
 Explosive limit - upper (%) No data available.

Vapor pressure No data available.  
 Vapor density Not available.  
 Relative density No data available.  
**Solubility(ies)**  
 Solubility (water) Very slight  
 Partition coefficient (n-octanol/water) Not available.  
 Auto-ignition temperature No data available.  
 Decomposition temperature No data available.  
 Viscosity No data available.

**Other information**  
 Density 37.00 - 56.00 lb/ft<sup>3</sup> (0.6 to 0.9 g/cc3)  
 Explosive properties Not explosive  
 Oxidizing properties No oxidizing properties.  
 Potential for dust explosion No data available.

**10. Stability and reactivity**

Reactivity Not available.  
 Chemical stability Material is stable under normal conditions.  
 Possibility of hazardous reactions Hazardous polymerization does not occur.  
 Conditions to avoid None known.  
 Incompatible materials Strong oxidizing agents.  
 Hazardous decomposition products Hazardous decomposition products formed under fire conditions.

**11. Toxicological information**

**Information on toxicological effects**

Acute toxicity Based on available data, the classification criteria are not met.

Components	Species	Test Results
Dried Bacillus lentus fermentation solubles (beta-D-mannanase) (CAS 37288-54-3)		
Chronic		
Oral		
NOAEL	Rat	> 75 mg/kg, 90 days (equivalent to >1000X commercial dose)

Skin corrosion/irritation Rabbit: No skin irritation. (Hemicell HT)  
 Serious eye damage/eye irritation Rabbit: Irritating to eyes. (Hemicell HT)

**Respiratory or skin sensitization**  
 Respiratory sensitization May cause sensitization by inhalation.

**Skin sensitization** Local Lymph Node Assay (LLNA): May cause sensitization by skin contact. (Hemicell HT)  
**Germ cell mutagenicity** Results in genetic toxicity assays (in vitro): Negative (beta-D-mannanase)  
Based on available data, the classification criteria are not met.  
**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.  
Based on available data, the classification criteria are not met.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Mineral Oil, technical grade white oil (CAS 8012-95-1) 3 Not classifiable as to carcinogenicity to humans.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Reproductive toxicity** Due to lack of data the classification is not possible.  
**Specific target organ toxicity - single exposure** No significant target organ toxicity reported.  
Based on available data, the classification criteria are not met.  
**Specific target organ toxicity - repeated exposure** No significant target organ toxicity reported.  
Based on available data, the classification criteria are not met.  
**Aspiration hazard** Due to lack of data the classification is not possible.  
**Chronic effects** No significant target organ toxicity reported.

**12. Ecological information**

**Ecotoxicity** Not expected to be harmful to aquatic organisms.  
**Persistence and degradability** The active ingredient, an enzyme, does not persist but is naturally broken down into smaller compounds and excreted.  
**Bioaccumulative potential** The product does not contain any substances expected to be bioaccumulating.  
**Mobility in soil** No data available.  
**Other adverse effects** Not available.

**13. Disposal considerations**

**Disposal instructions** Dispose of contents/container in accordance with local/regional/national/international regulations.

**14. Transport information**

**DOT**  
Not regulated as dangerous goods.

**IATA**  
Not regulated as dangerous goods.

**IMDG**  
Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** This substance/mixture is not intended to be transported in bulk.

**15. Regulatory information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
CERCLA/SARA Hazardous Substances - Not applicable.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**  
 Immediate Hazard - Yes  
 Delayed Hazard - No  
 Fire Hazard - Yes  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. Massachusetts RTK - Substance List**

Mineral Oil, technical grade white oil (CAS 8012-95-1)

**US. New Jersey Worker and Community Right-to-Know Act**

Mineral Oil, technical grade white oil (CAS 8012-95-1)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Mineral Oil, technical grade white oil (CAS 8012-95-1)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

Not Listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 11-14-2014  
**Version #** 01  
**Lilly Lab Code** Health: 2  
 Fire: 1  
 Reactivity: 0  
 Special 1: A

**Disclaimer**

As of the date of issuance, we are providing available information relevant to the handling of this material in the workplace. All information contained herein is offered with the good faith belief that it is accurate. THIS MATERIAL SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature which may accompany the finished product.

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**Revision Information**

Product and Company Identification: Synonyms

