



SAFETY DATA SHEET

1. Identification

Product identifier	Hemicell W Feed Enzyme for Poultry and Swine
Other means of identification	
Item Code	AG1303
Synonyms	Hemicell W-D * Hemicell-W Feed Enzyme for Poultry and Swine
Recommended use	Feed Enzyme; zootechnical feed additive.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
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	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.
H334	May cause an allergic skin reaction.
	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statement

Prevention

P261	Avoid breathing dust.
P284	In case of inadequate ventilation wear respiratory protection.
P272	Contaminated work clothing should not be allowed out of the workplace.

Response

P302 + P352	IF ON SKIN: Wash with plenty of water.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P362 + P364	Take off contaminated clothing and wash it before reuse.

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	%
Liquid bacillus lentus fermentation product (β -Mannanase)		37288-54-3	3
Dried Trichoderma longibrachiatum fermentation solubles (xylanase)		9025-57-4	6
Linseed Meal Solvent Extracted		N/A	55
Mineral Oil, technical grade white oil	MINERAL OIL	8012-95-1	1

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

4. First-aid measures

Inhalation	Move to fresh air. Oxygen or artificial respiration if needed. Get medical attention immediately.
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	May cause allergic respiratory reaction. May cause allergic skin reaction.
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 (CO ₂). 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	<p>Small Spillages:</p> <p>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.</p> <p>Large Spillages:</p> <p>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.</p>
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

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/m3	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/m3	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/m3	Mist.
	TWA	5 mg/m3	Mist.

Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	Lilly Interim Exposure Guideline: <100 micrograms/m3 TWA 12 hour (beta-D-mannanase)
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.
Other	Chemical-resistant gloves and impermeable body covering to minimize skin contact.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the respirator.
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.
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9. Physical and chemical properties

Appearance

Physical state	Solid.
Form	Solid.
Color	Light brown.
Odor	Plant meal
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.

Flammability (solid, gas) No test data available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Very slight

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Explosive properties Not explosive.

Oxidizing properties No oxidizing properties.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

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

Components	Species	Test Results
Liquid bacillus lentus fermentation product (β -Mannanase) (CAS 37288-54-3)		
Acute		
Inhalation		
LC	Rat	> 4.95 mg/l, 4 h No mortality.
Oral		
LD	Rat	> 5 g/kg No mortality.

Skin corrosion/irritation No skin irritation. (Similar product)
Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Slightly irritating. (Similar product)
Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Respiratory sensitization May cause sensitization by inhalation.

Skin sensitization Local Lymph Node Assay (LLNA): Causes sensitization. (Similar product)

Germ cell mutagenicity Results in genetic toxicity assays (in vitro): Negative (B-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 regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

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	Not applicable.

12. Ecological information

Ecotoxicity Not expected to be harmful to aquatic organisms.

Components		Species	Test Results
Dried Trichoderma longibrachiatum fermentation solubles (xylanase) (CAS 9025-57-4)			
<i>Chronic</i>			
Other	NOEC	Pseudokirchnerella subcapitata	> 10000 mg/l
<i>Aquatic</i>			
<i>Acute</i>			
Crustacea	LC50	Daphnia magna	3035 mg/l
Fish	LC50	Fathead minnow (Pimephales promelas)	85 mg/l
Liquid bacillus lentus fermentation product (β -Mannanase) (CAS 37288-54-3)			
<i>Aquatic</i>			
<i>Acute</i>			
Algae	ErC50	Algae (Pseudokirchneriella subcapitata)	> 100 mg/l, 72 h
Crustacea	EC50	Daphnia magna	> 100 mg/l, 46 h
Fish	LC50	Rainbow Trout	> 100 mg/l, 96 h

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 methods/information Dispose of contents/container in accordance with local/regional/national/international regulations.
Do not allow this material to drain into sewers/water supplies.

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 Not available.

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 regulated.

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. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

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

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 11-05-2014

Revision date 11-04-2016

Version # 03

Lilly Lab Code Health: 1
 Fire: 1
 Reactivity: 0
 Special 1: A

List of abbreviations IEG: Lilly Interim Exposure Guideline TWA: Time Weighted Average

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.

For additional information contact: DO NOT USE ANYONE
 Elanco Animal Health
 00+1+317-276-2000
 00+1-800-428-4441

Revision information

Hazard(s) identification: Hazard statement
Hazard(s) identification: Prevention
Hazard(s) identification: Response
First-aid measures: Most important symptoms/effects, acute and delayed
Physical & Chemical Properties: Multiple Properties
Toxicological information: Chronic effects
Toxicological information: Corrosivity
Toxicological information: Eye contact
Toxicological information: Skin contact
Other information, including date of preparation or last revision: Disclaimer
Other information, including date of preparation or last revision: List of abbreviations
GHS: Classification