

SAFETY DATA SHEET

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1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Enya™**
Manufactured for: Heartland AG, Inc.
P.O. Box 167
407 W. Depot Road
Farmer City, IL 61842
Product Use: Liquid Ammonium Sulfate Plus Antifoam
Emergency telephone number: (Chemtrec Information 24 hours) (800) 424-9300
Customer Service, call: (800) 775-0333

2. HAZARDS IDENTIFICATION

GHS Classification:

Acute Toxicity, Category 4 (oral), H302

Skin Irritation, Category 2, H315

Eye Irritation, Category 2B, H320



H302, H315

Signal Word: Warning

Hazard Statements:

H302: Harmful if swallowed.

H315: Causes skin irritation.

H320: Causes eye irritation.

Precautionary Statements:

Prevention

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P103: Read label before use.

P264: Wash protective equipment and work clothes thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor or Chemtrec if person feels unwell.

P302+P352: IF ON SKIN: Wash with plenty of water.

P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.

P321: Treat symptomatically.

P330: Rinse mouth.

P332+P313: If skin irritation occurs: Get medical advice or attention.

P337+P313: If eye irritation persists: Get medical attention or advice.

P362+P364: Take off contaminated clothing and wash it before reuse.

Disposal

P501: Dispose of contents/container to disposal plant in accordance with federal, state and local regulations.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS Number	OSHA PEL	ACGIH TLV	Weight %
Proprietary				

4. FIRST AID MEASURES

IF SWALLOWED: Call a POISON CENTER/doctor or Chemtrec if person feels unwell. Rinse mouth. Have person sip a glass of water if able to swallow. Do NOT induce vomiting, unless told to by a poison control center or doctor. Do not give anything to an unconscious person.

IF ON SKIN: Wash affected area with plenty of soap and water. Use tepid water if available. If skin irritation occurs: Get medical advice or attention. Treat symptomatically. Take off contaminated clothing and wash it before reuse.

IF INHALED: Move person to fresh air. If person is having difficulty breathing, give oxygen. If not breathing, give artificial respiration.

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 or attention.

Medical Conditions Aggravated by Overexposure: Repeated or prolonged exposure is not known to aggravate medical condition.

Other Effects: This product is not a carcinogen by NTP, OSHA and ACGIH.

5. FIREFIGHTING MEASURES

Suitable Extinguishing media: Carbon dioxide or dry chemical for small fires. Foam (alcohol, polymer or ordinary), and wear fog spray for large fires.

PPE and Precautions: Fire fighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water spray.

Additional Fire and Explosion Data: Thermal degradation yields ammonia and sulfur trioxide. Like most dry chemicals, a potential dust explosion exists if the dust concentration in the air is too high. Good housekeeping procedures and sound engineering practices are required to reduce this potential hazard. (1) This material would not ignite at energies up to 40 joules, the highest tried. This material would ignite when subjected to a 24-watt continuous arc. (2) In larger vessels, explosion may occur at lower dust concentrations.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill: Evacuate the spill area, except for cleanup personnel. Wear NIOSH/MSHA-approved respirator and protective equipment. Control spill with adsorbent pads or booms. Recover free liquid. For recovery or disposal, add inert absorbent (sand, earth, sawdust, etc.) to spill area and shovel into containers for disposal.

Disposal: Product is slippery under foot; flush smooth surfaces thoroughly. Dispose of collected waste in accordance with federal, state and local regulations.

7. HANDLING AND STORAGE

Precautions to be Taken in Handling: Keep away from heat, sparks and flame. Keep container sealed when not in use. Safety goggles with full-face shield and eyewash recommended. USDA-accepted nitrile (CFR-20) or neoprene rubber (CFR-21) recommended. Wear appropriate clothing to prevent repeated or prolonged skin contact. Use only with adequate mechanical exhaust ventilation.

Precautions to be Taken in Storage: Product should be stored in a dry place at temperatures between 40 and 100°F. Do not store in metal containers (corrosion risk). Do not store together with food, beverage and animal feed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Note: When selecting personal protective equipment and clothing, follow all of the manufacturer specifications and recommendations that apply to your specific operation and processing conditions. Take into consideration all working conditions and all chemicals to be handled or processed.

Component Exposure Limits: N/D

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Eye/Face Protections:	Wear splash-proof chemical safety goggles. Contact lenses should not be worn when working with chemicals.
Skin Protection:	Wear chemically impervious gloves, long-sleeved shirt, pants, socks and shoes to minimize skin contact. As precautions, wash hands and face with mild soap and water before eating, drinking, smoking or using restroom. After each shift, clean all protective equipment, wash work clothes, and shower.
Respiratory Protection:	Not required under normal use conditions with good ventilation. Protect against spray mists. Respirator recommended in areas of poor ventilation.
General Protection:	Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Wash thoroughly after handling product.
Note:	Eye wash fountains and drench showers should be located within a 10 second walk from the work area per ANSI Z358.1-2009.

Personal Protection in Case of Large Spill: Splash goggles, full suit, boots and gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Hazy yellow liquid	LEL:	N/A
Odor:	Slight ammonia odor	Vapor Pressure:	N/D
Odor Threshold:	N/D	Vapor Density:	N/D
pH (neat):	6 to 7	Relative Density:	1.1
Melting Point:	N/D	Solubility in water:	Soluble
Freezing Point:	N/D	Partition Coefficient:	N/D
Boiling Point:	212°F	Autoignition Temperature:	N/D
Flash Point:	N/A	Decomposition Temperature:	N/D
Evaporation Rate:	N/D	VOC:	N/D
Flammability:	N/A	Viscosity:	N/D
UEL:	N/A		

10. STABILITY AND REACTIVITY

Stability:	The product is stable under normal conditions.
Possibility of Hazardous Reactions:	Hazardous polymerization will not occur.
Condition to Avoid:	Fire and excessive heat.
Incompatible Materials:	Strong oxidizers, bases, chlorates, nitrate.
Hazardous Decomposition Products:	Thermal decomposition may produce ammonia, sulfur trioxides, carbon monoxide and carbon dioxide. Heating to dryness will cause the production of ammonia and oxides of sulfur. Ammonia may form flammable mixtures with air.

11. TOXICOLOGICAL INFORMATION

No toxicological data is available for this product.

12. ECOLOGICAL INFORMATION

No Ecological data is available for this product.

13. DISPOSAL CONSIDERATIONS

Component Waste Numbers:	No EPA Waste Numbers are applicable for this product's components.
Disposal Instructions:	Recycle or rework material if at all possible. Incinerate material at an approved facility. Treat at an acceptable waste treatment facility or municipal waste treatment plant after

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proper testing and approval waste samples in compliance with applicable federal, state and local environmental regulations.

Container Reuse:

An empty container can contain product residue, and should not be reused. If not professionally cleaned and reconditioned, crushing or other means is recommended to prevent unauthorized reuse. **Dispose of container to disposal plant in accordance with federal, state and local regulations.**

14. TRANSPORT INFORMATION

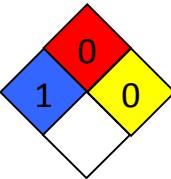
DOT Status (Highway and rail): Not Regulated
IATA Status (Air): Not Regulated
Marine Pollutant: No

15. REGULATORY INFORMATION

SARA HAZARD: No
TSCA: Components listed
AICS (Australia): Components listed
DSL (Canada): Components listed
EINECS (Europe): Components listed

16. OTHER INFORMATION

HMIS Hazard Rating	NFPA Rating
HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	X

The NFPA diamond hazard rating graphic is a diamond shape divided into four quadrants. The top-left quadrant is blue and contains the number '1'. The top-right quadrant is red and contains the number '0'. The bottom-left quadrant is blue and contains the number '1'. The bottom-right quadrant is yellow and contains the number '0'.

Date Prepared: September 24, 2015

Last Updated: September 24, 2015

WHILE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREON, HEARTLAND AG. INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

N/R—Not Rated

N/D—Not Determined

N/A—Not Applicable

N/E—Not Established

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.