

U.S. Transport Summary: Not regulated by the U.S. D.O.T. as a hazardous material.**1. PRODUCT AND COMPANY IDENTIFICATION****PRODUCT IDENTITY:** THRIVE Solutions-AG Ammonium Polyphosphate Solution, 10-34-00**PRODUCT ID #:** LC103400**CAS#:** 68333-79-9**COMMON NAME:** APP, Ammonium Polyphosphate Solution, 10-34-00**PRODUCT SDS #:** SDS LC103400**CHEMICAL DESCRIPTION:** N/A**ISSUE DATE:** May 30, 2015**RECOMMENDED USE:** Fertilizer, Animal Feed, Industrial**REVISION DATE:** March 13, 2018**PRODUCT RESTRICTIONS:** See product label for any restrictions on the use of this product.**VERSION NO.** 01**EPA REGISTRATION #:** Exempt**MANUFACTURER:**

MEARS FERTILIZER, INC.

P.O. Box 1271

629 North Industrial Road

El Dorado, KS 67042

**FOR EMERGENCIES, SPILL, LEAK, FIRE, EXPOSURE,
OR ACCIDENT, CALL:****CHEMTREC 1-800-424-9300 (24 hours)****NON-EMERGENCY BUSINESS INQUIRIES:****8:00 a.m. - 5:00 p.m. (CST) Monday - Friday**

Mears Fertilizer, Inc.: (316) 321-3674 or

Toll Free: (800) 345-9143

2. HAZARDS IDENTIFICATION**POTENTIAL HEALTH EFFECTS -**

Eyes: Causes moderate but temporary eye irritation.
Skin: May cause mild skin irritation including temporary redness and itching.
Inhalation: May cause irritation of the upper respiratory tract.
Ingestion: May be harmful if swallowed.
Pre-existing Conditions: Pre-existing conditions may be aggravated by exposure.
Chronic Health Effects: None known.

CARCINOGENICITY: NTP: Not Listed
IARC: Not Listed
OSHA: Not Listed

PHYSICAL HAZARDS: Not classified**HEALTH HAZARDS:** Not classified**OSHA DEFINED HAZARDS:** None**LABEL ELEMENTS -**

Hazard Symbol: Not Applicable
Signal Word: Not Applicable
Hazard Statement: Not Applicable

% OF PRODUCT WITH UNKNOWN TOXICITY: 0.00%**PRECAUTIONARY STATEMENTS -**

Prevention: Wash hands thoroughly after handling. Wear eye and face protection. Do not breathe mist.
Response: If in eyes: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. Get medical attention if you feel unwell.
Storage: See Section 7 for storage information.
Disposal: Dispose of contents/container in accordance with Federal, state and local regulations.

HAZARD(S) NOT OTHERWISE CLASSIFIED: Not classified**SUPPLEMENTAL INFORMATION:** Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

MIXTURE/SUBSTANCE

<u>Chemical Name</u>	<u>% Weight</u>	<u>CAS Reg. #</u>	<u>TLV</u>	<u>PLV</u>
Ammonium Polyphosphate	50 - 60%	68333-79-9	Not applicable	Not applicable
Water	40 - 50%	7732-18-5		

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Other ingredients not specifically listed are considered non-hazardous and are confidential business information under 29 CFR 1910.1200(I).

See Section 8 for exposure limits.

4. FIRST AID MEASURES

IF IN EYES:	Do not rub eyes. Flush eyes immediately and thoroughly with running water for 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. If irritation persists, get medical attention.
IF ON SKIN OR CLOTHING:	Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Continue rinsing. Obtain medical attention if irritation occurs.
IF SWALLOWED:	Call a poison control center or doctor immediately for treatment advice. If victim is conscious, give two to four glasses of water and induce vomiting by touching finger to back of throat. Do not give anything by mouth to an unconscious person.
IF INHALED:	Remove victim from contaminated area. If breathing is labored, administer oxygen. If irritation persists, get medical attention.
NOTES TO PHYSICIAN:	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Patient treatment should be based on sound judgment of the physician and the individual reactions of the patient.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:	This product is essentially non-flammable and is used commercially as a fire retardant. Use media suitable to extinguish source of fire.
SPECIAL FIRE FIGHTING PROCEDURES:	Wear NIOSHA/MSHA approved self-contained breathing apparatus and full protective gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Avoid breathing vapors; keep upwind. Use water spray to cool unopened containers.
HAZARDOUS COMBUSTION PRODUCTS:	Heating may cause release of ammonia gas.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Heating of closed or sealed containers may cause a violent rupture of the container due to thermal expansion of compressed gases.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during cleanup. For personal protection see Section 8. Avoid contact with skin and eyes. Ensure adequate ventilation.
ENVIRONMENTAL PRECAUTIONS:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). This product is a non-hazardous liquid fertilizer solution designed to supply potassium and sulfur to agricultural crops.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP -	
Small Spill:	Stop leak if without risk. Move containers from spill area. Confine and absorb small releases with sand, earth, or other inert material. Shovel up absorbed material and place in drums for disposal as a chemical waste or recycle as a fertilizer as the original product was intended. Clean surface thoroughly for residual contamination. For waste disposal see Section 13.
Large Spill:	Stop leak if without risk. Prevent entry into sewers, water courses, basements or confined areas by diking area with sand or earth. Recover as much of the spilled product as possible using portable pump and hoses. Use as originally intended or dispose of as a chemical waste. Treat remaining material as a small release (above).

GENERAL CAUTION: Spill area may be quite slippery.

7. HANDLING AND STORAGE

HANDLING: Avoid contact with eyes. Use only outdoors or in a well ventilated area. Avoid prolonged or repeated breathing of vapors. Immediately clean up spills that occur during handling. Keep containers closed when not in use. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

STORAGE: Store in a cool, dry area away from children, combustibles, feed, and food products. Keep out of direct sunlight. Store away from incompatible materials. Do not re-use empty containers. Protect from exposure to fire conditions. Keep out of reach of children.

MINIMUM STORAGE TEMP: Not known.

OTHER PRECAUTIONS: Consult Federal, state and local laws and regulations pertaining to storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS: No exposure limits noted for ingredient(s).

EXPOSURE GUIDELINES: No exposure limits noted for ingredient(s).

ENGINEERING CONTROLS: Provide adequate general and local exhaust ventilation where necessary. Provide eyewash station.

PERSONAL PROTECTION EQUIPMENT -

EYE / FACE PROTECTION: Wear approved safety glasses or goggles when eye contact is possible.

SKIN PROTECTION: Wear suitable gloves when handling this product over long periods. If skin irritation occurs, wear long sleeves.

RESPIRATORY PROTECTION: Wear NIOSH approved respiratory protective equipment when workplace conditions warrant use of a respirator.

GENERAL HYGIENE CONSIDERATIONS: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Handle in accordance with good industrial hygiene and safety practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE -

Physical State:	Liquid	VAPOR PRESSURE:	Not determined
Form:	Liquid	VAPOR DENSITY:	Not determined
Color:	Black, lite to dark green	VISCOSITY:	Not determined
ODOR:	Slight ammonia odor	SPECIFIC GRAVITY (H₂O=1):	1.400 to 1.450
ODOR THRESHOLD:	17 ppm Ammonia)	DENSITY (lbs/gal):	@11.68
pH:	5.70 to 6.50	PARTITION COEFFICIENT:	Not applicable
MELTING POINT/FREEZING POINT:	-0.4°F	SOLUBILITY(IES):	water and hot water
INITIAL BOILING POINT/RANGE:	Not determned	AUTO-IGNITION TEMP:	Not applicable
FLASH POINT:	Non-combustible	DECOMPOSITION TEMP:	Not determined
EVAPORATION RATE:	Not applicable	EXPLOSIVE PROPERTIES:	Not applicable
FLAMMABILITY (SOLID, GAS):	Non-combustible	OXIDIZING PROPERTIES:	Not determined
FLAMMABILITY / EXPOSURE LIMITS -		OTHER INFORMATION -	
Flammability Limit - Lower:	Not determined	Heat of Combustion:	Not determined
Flammability Limit - Upper:	Not determined		

10. STABILITY AND REACTIVITY

REACTIVITY: The product is stable and non-reactive under normal conditions of use, storage and transportation.

CHEMICAL STABILITY: The product is stable under normal conditions of temperature and pressure.

POSSIBILITY OF HAZARDOUS REACTIONS: Under normal conditions of storage and use, hazardous reactions will not occur.

CONDITIONS TO AVOID: Excessive heat.

INCOMPATIBLE MATERIALS: Strong oxidizing agents. Bases. Reactive metals. May attack copper, zinc and their alloys.

HAZARDOUS DECOMPOSITION PRODUCTS: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

INFORMATION ON LIKELY ROUTES OF EXPOSURE-

INGESTION:	May cause discomfort if swallowed.
INHALATION:	In high concentrations, vapors may be irritating to the respiratory system.
SKIN CONTACT:	Prolonged exposure may cause skin irritation.
EYE CONTACT:	May cause eye irritation on direct contact.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:

Direct contact with eyes may cause temporary irritation.

INFORMATION ON TOXICOLOGICAL EFFECTS -

ACUTE TOXICITY:	May cause discomfort if swallowed.
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TOXICOLOGICAL DATA

<u>Product/Ingredient Name</u>	<u>Results</u>	<u>Species</u>	<u>Test Results</u>
Ammonium Polyphosphate	LD50 Oral	Rat - Male/Female	>2000 mg/kg
	LD50 Dermal	Rat - Male/Female	>5000 mg/kg

SKIN CORROSION/IRRITATION:	Prolonged exposure may cause skin irritation.
SERIOUS EYE DAMAGE/IRRITATION:	May cause eye irritation on direct contact.
RESPIRATORY SENSITIZATION:	No data available.
SKIN SENSITIZATION:	No data available.
GERM CELL MUTAGENICITY:	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.
REPRODUCTIVE TOXICITY:	Based on available data, the classification criteria are not met.
SPECIFIC TARGET ORGAN TOXICITY: (Single Exposure)	In high concentrations, vapors may be irritating to the respiratory system.
SPECIFIC TARGET ORGAN TOXICITY: (Repeated Exposure)	Based on available data, the classification criteria are not met.
ASPIRATION HAZARD:	Based on available data, the classification criteria are not met.
CHRONIC EFFECTS:	Prolonged exposure may cause chronic effects.
FURTHER INFORMATION:	No other specific acute or chronic health impact noted.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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<u>Product/Ingredient Name</u>	<u>Species</u>	<u>Test Results</u>	
Ammonium Polyphosphate	Aquatic		
	Crustacea	Water flea (Daphnia magna)	627 - 992 mg/l, 48 hours
	Fish	Chinook salmon (Oncorhynchus tshawytscha)	106 mg/l, 96 hours

PERSISTENCE AND DEGRADABILITY:	This substance will promote algae growth which may degrade water quality and taste.
BIOACCUMULATIVE POTENTIAL:	No data available for this product.
MOBILITY IN SOIL:	This product is water soluble and may disperse in soil.
OTHER ADVERSE EFFECTS:	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

WASTE TREATMENT METHODS

PRODUCT

METHODS OF DISPOSAL: The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product

Ammonium Polyphosphate Solution, 10-34-00

residues should not be disposed of via the sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste legislation and any regional local authority requirements.

HAZARDOUS WASTE: Within the present knowledge of the supplier, this product is not regarded as hazardous waste.

PACKAGING

METHODS OF DISPOSAL: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should be considered when recycling is not feasible.

SPECIAL PRECAUTIONS: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORTATION INFORMATION

US DOT: Not regulated by the U.S. Department of Transportation as a hazardous material for ground shipment.

IMDG: Not determined

IATA: Non-hazardous under IATA regulations.

HAZARD CLASS: None

C.A.S. NUMBER: 68333-79-9

REPORTABLE QUANTITY: None

D.O.T. NUMBER: None

LABELS REQUIRED: None

HAZARD WASTE NO: None

PLACARD: None

EPA REGISTRATION NO: None

U.S. SURFACE FREIGHT CLASSIFICATION: Class 43, Misc Water Solutions

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS: This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA INVENTORY: Not Listed.

NFPA HAZARD RATING:

0	Least
1	Slight
2	Moderate
3	High
4	Severe

0	Health
0	Flammability
0	Reactivity

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) -

SARA Title III Hazard Categories:

Immediate Hazard	No
Delayed Hazard	No
Fire Hazard	No

Pressure Hazard	No
Reactivity Hazard	No

SARA 302 EXTREMELY HAZARDOUS SUBSTANCE: No

SARA 311/312 HAZARDOUS CHEMICAL: No

SARA 313 (TRI REPORTING): Not Regulated

US OSHA SPECIFICALLY REGULATED SUBSTANCE (29 CFR 1910.1001-1050): Not Listed

CERCLA HAZARDOUS SUBSTANCE LISTED (40 CFR 302.4): This product does not contain chemicals which have a reportable quantity (RQ) under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

OTHER FEDERAL REGULATIONS -

CLEAN AIR ACT (CAA) SECTION 112 -

Hazardous Air Pollutants (HAPs) List: Not Regulated

Accidental Release Prevention (40 CFR 68.130) List: Not Regulated

SAFE DRINKING WATER ACT (SDWA): Not Regulated

FOOD AND DRUG ADMINISTRATION (FDA): Not Regulated

US STATE REGULATIONS -

US CALIFORNIA PROPOSITION 65:

This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986, requires notification of potential exposure to substances identified by the State of California as causing cancer, birth defects or other reproductive harm.

16. OTHER INFORMATION

ISSUE DATE: May 30, 2015
REVISION DATE: March 13, 2018
VERSION NO. 01

NOTICE TO READER**DISCLAIMER AND LIMITATIONS OF LIABILITY:**

The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet (SDS) and was prepared pursuant to Government regulation(s) that identify specific types of information to be provided. This SDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license.

Additional information may be needed to evaluate other uses of the product, including use of the product in combination with any materials or in any processes other than those specifically referenced. Information provided herein with respect to any hazards that may be associated with the product is not meant to suggest that use of the product in a given application will necessarily result in any exposure or risk to workers or the general public. No responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product. Purchasers and users assume all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Purchasers and users of the product specifically should advise all of their employees, agents, contractors and customers who will use the product of this SDS.