

## SDS-SAFETY DATA SHEET

<b>Product name:</b> Ammonium Polyphosphate Solution	<b>SDS No:</b> LP/SDS-009		
<b>CHEMTREC EMERGENCY TELEPHONE:</b> 800-424-9300	<b>Version:</b> LP 5.0		
<b>Section 1 - Identification</b>			
<b>Product Identifier:</b> Ammonium Polyphosphate Solution (APP 11-37-0)			
<b>Synonyms:</b> Ammonium Pyrophosphate, Ammonium Polyphosphate (Abbr: APP)			
<b>Recommended Use of the Chemical and Restrictions On Use:</b> Agricultural, Industrial use			
<b>Supplier/Further Information:</b> Linhos Chemical, Inc. 113 Progress Drive, Rincon, GA 31326 Phone: 912-754-9569			
<b>Emergency Phone Number:</b> 24-HOUR CHEMTREC EMERGENCY TELEPHONE 800-424-9300			
<b>Section 2 - Hazards Identification</b>			
<b>NFPA Ratings:</b> Health: <b>1</b> Flammability: <b>0</b> Reactivity: <b>0</b>			
<b>Potential Acute Health Effects:</b> Not generally considered hazardous.			
<b>Ingestion:</b> Not generally considered hazardous .			
<b>Inhalation:</b> Not considered an inhalation hazard under normal open air conditions.			
<b>Eye Contact:</b> Direct contact with the eyes will result in local discomfort.			
<b>Skin Absorption:</b> it is generally considered to be not hazardous.			
<b>Skin Contact:</b> it is generally considered to be not hazardous.			
<b>Effects of Overdose:</b> Directly contact with the liquid on open cuts in the skin or contact with the eyes will result in local discomfort.			
<b>Primary Routes of Exposure / Entry:</b> no data			
<b>Target Organs:</b>			
<b>Carcinogenicity Data:</b> no data			
See Section 11 for more Toxicological information			
<b>Section 3- Composition, Information on Ingredients</b>			
<b>Substances</b>			
Not applicable			
<b>Name</b>	<b>Product Identifier</b>	<b>%</b>	<b>GHS-US classification</b>
Ammonium polyphosphate	(CAS No.) 68333-79-9	58-60	Not classified
Total Phosphate as P <sub>2</sub> O <sub>5</sub>		37	Not classified

Nitrogen, as N		11	Not classified
<b>Section 4 - First Aid Measures</b>			
<p><b>Eye Exposure:</b> Immediately rinse with water for at least 15 minutes while holding the eyelids wide open. Obtain medical attention if irritation develops or persists.</p> <p><b>Skin Exposure:</b> Wash skin thoroughly with mild soap and water. Obtain medical attention if irritation develops or persists.</p> <p><b>Ingestion:</b> If a large amount is ingested, give 2-3 glasses of water and induce vomiting. Call a physician if you feel unwell.</p> <p><b>Inhalation:</b> If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Obtain medical attention if breathing difficulty persists.</p> <p><b>NOTE TO THE PHYSICIAN:</b> Treat symptomatically and supportively.</p>			
<b>Section 5 - Fire Fighting Measures</b>			
<p><b>Flammability Classification:</b> This product is essentially non-flammable</p> <p><b>Unsuitable extinguishing media:</b> None known.</p> <p><b>Fire hazard:</b> If involved in a fire the following toxic and/or corrosive fumes may be produced by thermal decomposition: Ammonia.</p> <p><b>Explosion hazard:</b> Product is not explosive</p> <p><b>Protection during firefighting:</b> Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).</p> <p><b>Other information:</b> Do not allow run-off from fire fighting to enter drains or water courses.</p> <p><b>Auto-Ignition Temperature:</b> Not applicable</p> <p><b>Flash Points:</b> Not applicable</p>			
<p><b>Products of Combustion:</b> Not applicable</p> <p><b>Hazardous Combustion Products:</b> See Section 10 Reactivity Incompatibilities.</p>			
<b>Section 6 - Accidental Release Measures</b>			
<p><b>Environmental Precautions:</b> Use and disposal, employing proper environmental control practices, should not cause significant environmental impact.</p> <p><b>Steps to be taken in case material is released or spilled:</b> Use a safe method collects the leakage or shipped to the waste disposal sites, Using liquid assimilate residues, according to the chemical nature get further disposal. Clean up pollution area, lotion discharge into the waste water tank.</p> <p><b>Spill and Leak Personal Procedures:</b> Wear appropriate personal protective as specified in Section 8.</p> <p><b>Environmental and Regulatory Reporting:</b> See Sections 12, 13 and 15</p>			
<b>Section 7 - Handling and Storage</b>			
<p><b>Additional hazards when processed:</b> When heated, material emits irritating fumes.</p> <p><b>Precautions for safe handling:</b> Handle in accordance with good industrial hygiene and safety procedures. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product.</p>			

**Hygiene measures:** Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

**Storage conditions:** Store tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials:** Zinc clad, copper bearing alloys and aluminum.

**Precautions to be taken in handling and storing:** for APP solutions, avoid using containers, pipes and fittings made of zinc-clad or copper bearing alloys.

**Storage:** for APP solutions, storage in open containers may result in formation of an ammonium polyphosphate solid on walls. Avoid contact with skin and eyes.

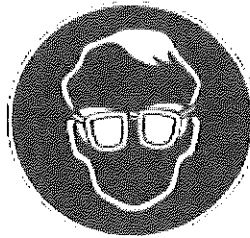
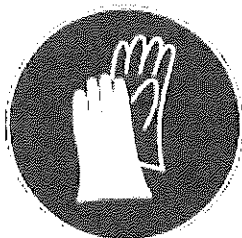
### Section 8 - Exposure Controls, Personal Protection

#### Control parameters

No exposure limit value known

**Appropriate engineering controls:** Ensure adequate ventilation, especially in confined areas

**Personal protective equipment:** Gloves. Safety glasses



**Other:** Eyewash fountain and safety shower in area.

**Hygienic Work Practices:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### Section 9 - Physical and Chemical Properties

**Physical State:** liquid

**Color and Appearance:** Light green or colourless

**pH:** 6.0~6.5

**Melting point:** No data available

**Specific Gravity:** 1.4 (at 24°C)

**Boiling Point:** >100°C (>212°F)

**Viscosity:** 140 cP at 18.3 °C

**Flashpoint:** Non-flammable

**Solubility in water:** Miscible

**Reaction with Water:** None

### Section 10 - Stability and Reactivity

**Reactivity:** Stable at ambient temperature and under normal conditions of use.

**Chemical Stability:** Stable at standard temperature and pressure.

**Possibility of hazardous reactions:** Hazardous polymerization will not occur.

**Conditions to avoid:**High temperature.

**Incompatible materials:** Zinc clad, copper bearing alloys and aluminum.

**Decomposition Products:** nitric oxide (NOx),moisture.

**Hazardous Decomposition Products:** Ammonia.

**Hazardous Polymerization:** Will not occur.

### Section 11 - Toxicological Information

Information on toxicological effects

Acute toxicity: Not classified

Ammonium polyphosphate (68333-79-9)

LD50 oral rat: 4740 mg/kg

Skin corrosion/irritation: Not classified

Serious eye damage/irritation: Not classified

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

Specific target organ toxicity(single exposure): Not classified

Specific target organ toxicity (repeated exposure): Not classified

Aspiration hazard:Not classified

### Section 12 - Ecological Information

#### Toxicity

<b>Ecotoxicity</b>	EPA Ecological Toxicity rating :	Slightly toxic to practically non-toxic to aquatic organisms based on the Federal Insecticide Fungicide and Rodenticide Act (FIFRA) acute (Oncorhynchus mykiss) 96-hr: LC50 = > 101 mg/L
	Acute Toxicity to Fish:	96-hr: LC50=>101mg/L
	Chronic Toxicity to Fish:	No data available.
	Acute Toxicity to Aquatic Invertebrates:	No data available.
	Chronic Toxicity to Aquatic Invertebrates:	No data available.

<b>Ecotoxicity</b>	Toxicity to Aquatic Plants:	No data available.
	Toxicity to Soil Dwelling Organisms:	No data available.
	Toxicity to Terrestrial Plants:	No data available.
<b>Environmental Fate:</b>	Stability in Water:	Stable.
	Stability in Soil:	Behaves as salts.
	Transport and Distribution:	No data available.
<b>Toxicity:</b>	Inorganic phosphates have the potential to increase the growth of freshwater algae, whose eventual death will reduce the available oxygen for aquatic life.	
<b>Degradation Products:</b>	Biodegradation:	The Phosphorus cycle is well understood.
	Photodegradation:	No data available.

### Section 13 - Disposal Considerations

Sewage disposal recommendations:	This material is hazardous to the aquatic environment. Keep out of sewers and waterways.
Waste disposal recommendations:	Place in an appropriate container and dispose of the contaminated material at a licensed site.
Additional information:	Dispose of waste material in accordance with all local, regional, national, and international regulations.

### Section 14 - Transport Information

**In accordance with DOT / TDG / ADR / RID / ADNR / IMDG / ICAO / IATA**

**DOT/TDG/ADR/RID/ADNR/IMDG/ICAO/IATA**

UN number

Not applicable

UN proper shipping name

Not applicable

Additional information:

Other information: No supplementary information available.

Overland transport

No additional information available

Transport by sea

Ammonium Polyphosphate Solution is classified by the USCG as an NLS under 33 CFR 154 per reference 46 CFR 153 (and MARPOL)

Air transport

No additional information available

### Section 15 - Regulatory Information

#### Chemical Inventory Status – Part 1 化学品目录情况-第一部分

Ingredient	TSCA	EC	Japan	Australia
Ammonium Polyphosphate (68333-79-9)	Yes	Yes	Yes	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes

#### Chemical Inventory Status – Part 2

Ingredient	Korea	Canada		Phil.
		DSL	NDSL	
Ammonium Polyphosphate (68333-79-9)	Yes	Yes	No	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes

Federal Regulation

Inventory Issues

All functional components of this products are listed on the TSCA Inventory.

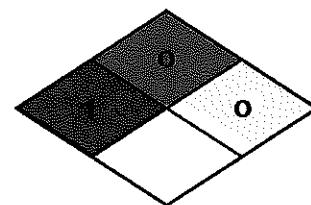
SARA Title III Hazard Classes

### Section 16 -Other Information

NFPA health hazard: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard: 0 - Materials that will not burn.

NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Disclaimer: The information provided in this Safety Data Sheet is correct to the best of our knowledge and belief, nonetheless we could not assure it is absolutely universal and precise. The information is designed only as safety precautions for those who have been properly trained and use this material. Individual user who has this SDS should make independent judgment of the applicability of this SDS when using it under peculiar conditions. We will not be responsible to any damage cause by using this SDS under peculiar conditions.

TO determine the applicability or effect of any law or regulation with respect to the product,you should consult with your legal advisor or the appropriate government agency.We will not provide advice on such matters,or be responsible for any injury or damage resulting from the use of the product described herein.