

**SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

<b>1.1 Product Name:</b>			
<b>Common Name:</b>	Calcium Nitrate solution		
<b>Chemical Description:</b>	Fertilizer solution derived from calcium nitrate		
<b>1.2 Manufactured For:</b>		<b>Emergency Telephone Number</b>	609-448-0935
Plant Food Company, Inc.		<b>Telephone Number for Information</b>	609-448-0935
38 Hightstown-Cranbury Station Road		<b>Date Prepared</b>	11/1/2011
Cranbury, NJ 08512			

**SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

*Hazardous Components (Specific Chemical)*

Identity: Common Name	(CAS #)	OSHA PEL	ACGIH TLV	Other Limits Recommended
Hydrated Ammonium Calcium Nitrate	15245-12-2	N/A	N/A	N/A
	#REF!	N/A	N/A	N/A
	#REF!	N/A	N/A	N/A
	#REF!	N/A	N/A	N/A
	#REF!	N/A	N/A	N/A
	#REF!	N/A	N/A	N/A
	#REF!	N/A	N/A	N/A

**SECTION 3: HAZARDS IDENTIFICATION**

Brown liquid with slight odor. May cause eye and skin irritation. May be harmful if ingested. Not D.O.T. regulated"  
 NEPA: Health:1 Reactivity:0 Flammability:0 Environment:0 (0=Insignificant=1 Slight 2=Moderate 3=High 4=Extreme)

**EMERGENCY OVERVIEW**

Contact may cause eye irritation. Repeated/prolonged skin contact may cause irritation. Ingestion may irritate gastrointestinal tract.

**3.1 POTENTIAL HEALTH EFFECTS**  
**EYE:** Contact with the eyes by product mist or solution may cause irritation or a burning sensation.  
**SKIN CONTACT:** Prolonged or repeated contact with product mist or solution may cause skin irritation.  
**SKIN ABSORPTION:** Absorption is unlikely to occur.  
**INGESTION:** Ingestion of product solution may cause irritation of the gastrointestinal tract to include nausea, vomiting and diarrhea.  
**INHALATION:** Inhalation of product mist may cause irritation of the nose, throat and respiratory tract.  
**CHRONIC EFFECTS/CARCINOGENICITY:** Not listed as a carcinogen by NTP, IARC or OSHA.

**SECTION 4: FIRST AID MEASURES**

**4.1 EYES:** Flush immediately with plenty of water for at least 15 minutes while holding eyelids apart to ensure complete irrigation of all eye and lid tissue. If irritation occurs, seek medical attention.  
**4.2 SKIN:** Wash with plenty of soap and water. Remove contaminated clothing and shoes under a safety shower. Get medical attention if irritation persists.  
**4.3 INGESTION:** If conscious and alert, administer water or milk to dilute, then induce vomiting. Call Poison Control Center or physician immediately. Do not give anything by mouth to an unconscious person.  
**4.4 INHALATION:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth and get medical attention. If heart has stopped beating, external heart massage should be applied. Obtain medical attention.

**SECTION 5: FIREFIGHTING MEASURES**

**5.1 FLAMMABLE PROPERTIES**  
**FLASHPOINT:** Not flammable **METHOD USED:** Closed Cup/NONCOMBUSTIBLE  
**5.2 FLAMMABLE LIMITS:** LFL: NA UFL: NA  
**5.3 EXTINGUISHING MEDIA:** Foam, carbon dioxide, dry chemical, or water fog.  
**5.4 FIRE & EXPLOSIVE HAZARDS:** This solution will not burn. However, high temperatures can evaporate product to dryness, leaving crystals of calcium nitrate, an oxidizing material. Calcium nitrate does not require atmospheric oxygen and an explosion may occur in the presence of combustible materials. At high temperatures this solution may release toxic fumes of carbon monoxide, nitrous oxide and other oxides.  
**5.5 FIRE FIGHTING EQUIPMENT:** Fire fighting procedures are based on possible calcium nitrate crystallization in fire conditions. Keep unauthorized personnel away.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1 SMALL RELEASES:** Confine and absorb small releases on sand earth or other inert absorbent. Use water spray to dilute to weaken fertilizer solution.  
**6.2 LARGE RELEASES:** Shut off release if safe to do so. Dike spill area to prevent runoff into sewers, rains or surface waterways. Recover as much of the solution as possible. Treat remaining material as a small release (above).

**SECTION 7: HANDLING AND STORAGE**

**7.1 HANDLING:** Avoid contact with eyes. Use only in a well ventilated area. Wash thoroughly after handling. Avoid prolonged or repeated breathing of vapors. Avoid prolonged or repeated contact with the skin.  
**7.2 STORAGE:** Store in original container only in a cool, well-ventilated, dry place at temperatures between 40° and 95°F. Do not store near food or feeds.  
**7.3 Transfer Equipment:** Transfer product using chemical-resistant plastic or stainless steel tanks, pumps, valves, etc.

**SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION**

**8.1 RESPIRATORY PROTECTION:** Not normally needed. If use generates an aerosol mist or respiratory irritation, use NIOSH-approved dust/moist respirator (such as 3M#8710). Ventilation: Where air contaminants can exceed acceptable criteria, use NIOSH/MSHA approved respiratory protection equipment. Respirators should be selected based on the form and concentration of contaminate  
**8.2 SKIN PROTECTION:** Neoprene rubber gloves and apron should be worn to prevent repeated or prolonged contact with the liquid. Wash contaminated clothing prior to reuse.  
**8.3 EYE PROTECTION:** Chemical goggles and a full face shield. **DO NOT WEAR CONTACT LENSES.**  
**8.4 EXPOSURE GUIDELINES:**

	TWA	STEL
OSHA	N/A	N/A
ACGIH	N/A	N/A

**8.5 ENGINEERING CONTROLS:** Use adequate exhaust ventilation to prevent inhalation of product vapors.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

9.1 APPEARANCE:	Brown liquid
9.2 ODOR:	Slight odor
9.3 VAPOR PRESSURE:	Not Known
9.4 VAPOR DENSITY:	Not Known
9.5 SOLUBILITY IN WATER:	Complete
9.6 SPECIFIC GRAVITY (H <sub>2</sub> O = 1):	1.456 @ 68°F
9.7 MELTING POINT:	
9.8 pH:	5.0 - 5.5
9.9 VOLATILE:	Not available
9.10 COLOR:	Brown liquid
9.11 WEIGHT PER GALLON:	12.2 lbs (5.5 kg)
9.12 STORAGE LIFE AT 70° F:	> 1 Year
9.13 PH-21C:	
9.15 VISCOSITY:	
9.16 SALT-OUT TEMPERATURE:	<23° F
9.17 EVAPORATION RATE:	Same as water
9.18 BOILING POINT:	Loses water at 212°F (100°C)

**SECTION 10: STABILITY AND REACTIVITY**

- 10.1 STABILITY: Stable under normal conditions of use and storage.
- 10.2 HAZARDOUS POLYMERIZATION: Not known to occur.
- 10.3 HAZARDOUS DECOMPOSITION PRODUCTS: Toxic nitrogen oxides will be released at high temperatures.
- 10.4 INCOMPATIBILITY: Not Available

**SECTION 11: TOXICOLOGICAL INFORMATION**

- 11.1 ORAL: LD<sub>50</sub> = 3900 mg/kg (oral, rat) May cause stomach cramps and/or nausea.
- 11.2 DERMAL: May cause slight irritation, especially from prolonged exposure. May cause redness.
- 11.3 INHALATION: None expected but inhalation may cause mild irritation of nasal mucous membranes.
- 11.4 CHRONIC/CARCINOGENICITY: Data not available
- 11.5 TERATOLOGY: Data not available
- 11.6 REPRODUCTION: Data not available
- 11.7 MUTAGENICITY: Data not available
- 11.8 EYES: May cause temporary eye irritation.

**SECTION 12: ECOLOGICAL INFORMATION**

- 12.1 Alga/Lemna Growth Inhibition: Not known.
- 12.2 Toxicity to Fish and Invertebrates: Not known
- 12.3 Toxicity to Plants: Not known
- 12.4 Toxicity in Birds: Not known

**SECTION 13: DISPOSAL CONSIDERATIONS**

accordance with state and local waste disposal regulations. Also, chemical additions or other alterations of this product may invalidate any disposal information in this

**SECTION 14: TRANSPORTATION INFORMATION**

D.O.T.	Not D.O.T. Regulated
Other Shipping Description:	Fertilizing Compounds (Manufactured), Liquid, NMFC Item 6810 Sub 6, LTL Class 70

**SECTION 15: REGULATORY INFORMATION**

- 15.1 CERCLA: None
- 15.2 SARA TITLE III, Section 313 Toxic Chemicals: None

**SECTION 16: OTHER INFORMATION**

Not harmed by freezing, but thaw frozen fertilizer slowly and stir before using. Store in a cool place. Rotate stock in storage to use oldest first. Refer to product  
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