30-7-14 Soluble Fertilizer
Safety Data Sheet #64877

Safety Data Sheet according to OSHA-GHS (29 CFR part 1910.1200 HCS 2012)

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: 30-7-14
Date of issue: October 2016

Product identifier:	30-7-14 Soluble Fertilizer
Recommended uses:	Fertilizer end-use, preparation of fertilizers mixtures. Dry fertilizer for mixing with water for foliar and soil applications.
Restrictions on uses:	None
Manufacturer:	Southern Agricultural Insecticides, Inc. P.O. Box 218 Palmetto, FL 34220
Company Telephone/Fax:	(941) 722-3285/(941) 723-2974
Emergency Telephone Number:	(800) 424-9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

Classification of the mixture: Not Classified

Hazard pictograms

Signal word Warning

Precautionary Statements

May be harmful if swallowed or inhaled. May cause eye/skin irritation. Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Do not ingest. Wash thoroughly after handling. Keep out of reach of children.

Potential health effects

Eye contact:	Contact with eyes may cause irritation.
Skin contact:	May cause skin irritation in susceptible persons.
Ingestion:	Possible gastrointestinal tract irritation.
Inhalation:	May cause irritation of respiratory tract.

Aggravated Medical Conditions:
Principle routes of exposure:
Target organ effects:

Components CAS-No Weight

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is to be considered as a mixture/preparation

Substance name	CAS No	Concentration %
Urea	57-13-6	53.85
Potassium nitrate	7757-79-1	31.80
Ammonium phosphate	7722-76-1	11.6
Iron EDTA	15708-41-5	1.55
Manganese EDTA	15375-84-5	.39
Zinc EDTA	14025-21-9	.34
Copper Sulfate	7758-99-8	.34
Sodium Borate	12280-03-4	.10

4. FIRST AID MEASURES

Eye contact: If in eyes, hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

Skin contact: If on skin or clothing, take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion: Call a physician or Poison Control Centre immediately. Have person sip a glass of water if able to swallow. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

Inhalation: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

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Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flammable properties:	Decomposes on heating.
Suitable extinguishing media:	Water spray, carbon dioxide, dry chemical, chemical foam
Explosion potential:	Dust at sufficient concentrations may form explosive mixtures with air.
Hazardous combustion products:	Thermal decomposition can lead to release of irritating gases and vapors
Fire fighting procedures:	Select appropriate method to surround and extinguish fire
Special protective equipment for firefighters:	In the event of fire, wear self-contained breathing apparatus.
Precautions for firefighters	Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (self contained breathing apparatus (SCBA)).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Avoid contact with skin, eyes and clothing.
Environmental precautions:	Prevent product from entering drains.
Methods for containment:	Vacuum or sweep up material and place in a disposal container.
Methods for cleaning up:	If material is uncontaminated, collect and reuse as' recommended for product. If material is contaminated, put in appropriate container and dispose. Flush with water.
Other information:	None

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handle in accordance with good industrial hygiene and safety practice. When applied as a spray, avid breathing spray mist. Do not damage containers while handling.

Conditions for safe storage, including any incompatibilities

Do not place damaged containers into storage. Store in a well-ventilated place. Store locked up. Keep out of reach of children. Do not contaminate any body of water by cleaning equipment or disposal or waste.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components	ACGIH:	OSHA:
Urea	Not Listed	Not Listed
Potassium nitrate, KN03	Not Listed	Not Listed
Iron EDTA	Not Listed	Not Listed
Zinc-EDTA	Not Listed	Not Listed
Copper-EDTA	Not Listed	Not Listed
Sodium Borate	2 mg/m^3 TWA	Not Listed
Ammonium phosphate	Not Listed	Not Listed
Magnesium sulphate,	Not Listed	Not Listed
Manganese-EDTA	Not Listed	Not Listed

Predicted No Effect concentration (PNEC) No information available

Engineering controls	Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard.

Personal Protective Equipment

Eye/face protection:	Eye/face protection is not required, but is recommended in manufacturing situations where contact may occur. Safety glasses with side shields or goggles.
Skin and body protection:	No special protective clothing is required under normal workplace conditions. If skin irritation occurs, use natural rubber gloves, durable cloth or impervious rubber gloves if contact with product is possible. After using product, remove clothing and wash before reuse.
Respiratory protection:	If airborne levels are high or product does not remain intact, use a combination of engineering controls (e.g. ventilation) and personal protection, e.g., NIOSH/MSHA approved respirator for dusts, mists, and fumes.
General hygiene considerations:	Wash hands before breaks and immediately after handling the product

Environmental exposure controls: Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Light blue, fine crystalline powder
Color	White to pale blue
Odor	Odorless
Odor Threshold	Not applicable
pH value	No data available
Melting point / freezing range	No data available
Boiling temperature / boiling range	Not applicable
Flash point	No data available
Vaporization rate / Evaporation rate	Not applicable
Flammable solids	Not flammable
Explosion limits (LEL, UEL)	Not applicable
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative Density	No data available
Solubility	Highly soluble
Partition coefficient n-octanol /water	Not applicable
Auto Ignition temperature {A IT)	Not applicable
Decomposition temperature	No data available
Viscosity	Not applicable
Explosive properties	No explosion hazard based on data of ingredients.
Oxidizing properties	No data available
Other information	None

10. STABILITY AND REACTIVITY

Stable under normal use conditions

Reactivity

No hazardous reaction when handled and stored according to provisions.

Chemical stability

Stable under normal storage and temperature conditions.

Possibility of hazardous reactions

None identified

Conditions to avoid

Keep out of reach of direct sunlight and store under dry conditions for quality reasons.

Incompatible materials

None known based on information available.

Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gasses and vapors.

11. TOXICOLOGICAL INFORMATION

Likely routes of exposure (inhalation, ingestion, skin and eye contact)

Eye contact, skin contact and inhalation. Exposure by ingestion is not expected to occur through normal industrial or agricultural use.

Symptoms related to the physical, chemical and toxicological characteristics

May be irritant to the respiratory tract. Causes eye irritation. May cause redness or irritation to the skin. Ingestion of large amounts may cause gastrointestinal disturbances. May cause nausea,vomiting and diarrhea.

Information on toxicological effects from short and long term exposure

There is no data for the mixture itself.

Acute toxicity

Acute toxicity	LD50:
Acute Toxicity Estimate for the mixture	No data available
Potassium nitrate	>2000 mg/kg bw
MAP	(rat, oral) > 2000 mg/kg
Urea	Oral 8471 mg/kg (Rat)
Assessment / classification:	Based on available data for the ingredients of the mixture, the classification criteria are not met.

Irritant and corrosive effects

Irritation to the skin	**Result**	**Method**
Potassium nitrate	non-irritant.	Equivalent/similar to OECD guideline 404
MAP	(rat, dermal) > 5000 mg/kg	
Assessment / classification:	Based on available data, the classification criteria are not met.	
Irritation to eyes	**Result**	**Method**
Potassium nitrate	Not-irritating	OECD Guideline 405
MAP	No data available	
Assessment / classification:	Based on available data, the classification criteria are not met.	

Respiratory or skin sensitisation

Skin sensitization	**Result**	**Method**
Potassium nitrate	not sensitizing.	OECD Guideline 429
MAP	No data available	
	Not hazardous by OSHA/WHMIS criteria	
Urea	No significant effects	
Respiratory sensitisation	No information available.	
Assessment / classification:	Based on available data, the classification criteria are not met.	

Genetic effects

The product has not been tested.

	Bacterial (Ames Test)	Chromosomal aberrations	Mutation in mammalian cell:
Potassium nitrate	negative	negative	negative
MAP	No data available	No data available	No data available
Urea	No significant effects	No significant effects	No significant effects

Assessment / classification: Based on available data, the classification criteria are not met.

Reproductive toxicity

Adverse effects on sexual function and fertility/developmental toxicity

This product has not been tested. Based on individual components,and data available, the classification criteria are not met.

Specific target organ toxicity (single exposure)

The product does not contain relevant ingredients classified as Target Organ Toxicant after single exposure.

Potassium nitrate	No relevant effect have been observed after single exposure to potassium nitrate.
MAP	Not available
Urea	No significant effects
Assessment / classification:	Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated exposure)

	Organs affected:	Effects	Guideline
Potassium nitrate	None	No effects (NOAEL >IS00 mg/kg bw)	OECO 422
MAP	No information available		
Urea	No significant effects		

Aspiration hazard

Physicochemical data and toxicological information does not indicate an aspiration hazard.
Assessment / classification: Based on available data, the classification criteria are not met

Carcinogenicity

International Agency for Research on Cancer (IARC)	No component of this product present at levels ≥0.1 is identified as known or anticipated carcinogen by IARC
National Toxicology Program (NTP)	No component of this product present at levels ≥0.1 is identified as known or anticipated carcinogen by NTP.
29 CFR part 1910, subpart Z	No component of this product present at levels ≥0.1 is identified as carcinogen or potential carcinogen by OSHA.
California Proposition 65	This product contains substances known to the State of California to cause cancer and/or birth defects or other reproductive harm
WHO (2003) Nitrate in drinking water	No association between nitrate exposure in humans and the risk of cancer.

Assessment / classification: Based on available data, the classification criteria is not met

Other Toxicological Information

12. ECOLOGICAL INFORMATION

There is no data for the mixture itself. The following information mostly refers to the major component of the product.

Ecotoxicity

Aquatic Toxicity

Potassium nitrate

96-h LC50	1378 mg/L	Poecilia reticulata (freshwater fish)
24-h EC50	490 mg/L	Daphnia magna (fresh water flea).
10 d EC50	> 1700 mg/L	Several algae species

Urea

96-h LC50	16200 -18300	Poecilia reticulata mg/L	Fish

MAP - (100%) May release ammonium ions that are toxic to fish. Un-ionized ammonia concentrations above 0.02 mg/l are considered toxic in fresh water. May release phosphates which will result in algae growth, increased turbidity, and depleted oxygen. At extremely high concentrations, this may be hazardous to fish or other marine organisms. Release to watercourses may cause effects downstream. Fish 96 hour LC50, OECD Guidelines 203 (rainbow trout): >86mg/L.

Persistence and degradability

The product contains mainly inorganic nitrate and phosphate salts. In aqueous solutions, these salts dissociate into their respective ions. Phosphate ions are finally incorporated into the Phosphorus cycle. Under anoxic conditions, denitrification occurs and nitrate is ultimately converted into molecular nitrogen as part of the Nitrogen cycle. This product has not been tested as a mixture.

Bioaccumulative potential

Low potential for bioaccumulation based on physicochemical properties of main components.

Mobility in soil

The components of this mixture have a low potential for adsorption. Portion not taken up by plants, can leach to ground-water.

Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS
Disposal should be in accordance with applicable federal and state laws. Product should, if possible, be used for an appropriate application.
Waste containing nitrates that exhibit the characteristic of ignitability has the EPA Hazardous Waste Number of D001 according to the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

14. TRANSPORTATION INFORMATION

US DOT (49CFR part 172)
The description shown may not apply to all situations. Consult 49 CFR, or appropriate dangerous goods regulations for additional description requirements (e.g. technical name) and mode-specific or quantity-specific shipping requirements.

DOT (Land)	Not DOT regulated (Manufactured Fertilizers NOI)
IATA (Air)	Not regulated
IMO/IMDG (Vessel)	Not regulated

15. REGULATORY INFORMATION
US Federal
SARA Title III Rules
Section 311/312 Hazard Classes
Not applicable
Section 313 Toxic Chemicals
Not applicable
Section 302 Extremely Hazardous Substances (EHS)/CERCLA Hazardous Substances
No ingredient is listed.
NFPA 704/2012: National Fire Protection Association

Health	2
Fire	0
Reactivity	1
Special	

Chemical Inventories

United States TSCA	All ingredients are listed
Canada DSL	All ingredients are listed

16. OTHER INFORMATION
The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Southern Agricultural Insecticides, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Southern Agricultural Insecticides, Inc. has been advised of the possibility of such damages.