

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

FORMULATED FOR:

Albaugh, LLC 1525 NE 36th Street Ankeny, IA 50021

PRODUCT NAME:	Select™ Defense 2-0-2
CHEMICAL NAME:	Inorganic/Organic Chemical Fertilizer Mixture
CHEMICAL FAMILY:	N-K Mixed liquid blended fertilizer

Date of Issue: 2/24/2017

2. HAZARDS INDETIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN - CAUTION - May cause mild eye and skin irritation. Avoid contact with skin, eyes, open cuts, and sores. In case of contact, flush with water. Get medical attention for eyes. This blended liquid fertilizer is derived from urea, potassium acetate, manganese nitrate, and plant extracts. Nausea and vomiting could be expected upon large dose ingestion. The acute ingestive effects are described as nausea, chills, and diarrhea. Eye and skin contact with these products could cause irritation (particularly in sensitive persons), and respiratory irritation could be expected from the unprotected inhalation of fertilizer mists. Product users should avoid prolonged or



repeated skin contact by wearing impervious gloves, long sleeve shirt, long pants, socks and rubber boots. Goggles for eye protection are recommended. Wash thoroughly after handling and using this product.

This product is a dark brown colored liquid with sugary, molasses and slight ammonia odor. Primary routes of entry are inhalation, eye contact and skin contact.

3. COMPOSTITION, INFORMATION ON INGREDIENTS

N-P-K (NITROGEN-PHOSPHORUS-POTASSIM) MIXED LIQUID BLENDED FERTILIZERS - No hazardous ingredient exceeds 1% of mixture.

Chemical Ingredients:	Percentage of Weight:	Cas Number
Total Nitrogen (N)	2.0	57-13-6
Soluble Potash (K ₂ O)	2.0	127-08-2
Manganese	1.0	10034-96-5
Citric acid	1.0%	77-92-9
Plant extracts	2.0%	Mixture
Blackstrap molasses	5%	68476-78-8

4. FIRST AID MEASURES

If in eyes:	Immediately rinse with water for 5 minutes
If on skin:	Wash skin with soap and water
If swallowed:	Rinse mouth with water and drink large a quantity of water
If inhaled:	Remove product or move person to fresh air

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method):	Not applicable
FLAMMABLE LIMITS (LFL & UFL):	Not applicable
EXTINGUISHING MEDIA:	Use medium appropriate to surrounding fire. Dry chemical, carbon dioxide,
	foam, water spray or fog.



HAZARDOUS COMBUSTION PRODUCTS: May include but are not limited to oxides of carbon, hydrogen chloride, hydrogen fluoride, oxides of ammonia, oxides of phosphorus, oxides of sulfur, hydrogen sulfide. SPECIAL FIRE FIGHTING PROCEDURES: Use water spray to cool containers exposed to fire. Remain upwind. Avoid breathing smoke. Wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Stop leak, contain spill and absorb with soil or natural absorbents. Sweep up waste and place in container for disposal. Wash down area. Uncontaminated spilled material may be reused.

7. HANDLING AND STORAGE

HANDLING: Avoid eye contact and prolonged skin contact. Respiratory protection is normally not required. Sealed containers may develop pressure, open with caution. Wash hands thoroughly after handling the product.
 STORAGE: Store in the original labeled container in a cool place away from direct sunlight. Keep separate from food and feed products and out of reach of children and animals. Avoid storage at temperatures of 110F or higher. Corrosive to steel, aluminum, brass. Use with stainless steel or PVC fittings. Product may stain unfinished wood, painted surfaces, or concrete.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: RESPIRATORY PROTECTION: PERSONAL PROTECTIVE EQUIPMEN not required, but its use is recommended.

Not normally required. Not normally required.

PERSONAL PROTECTIVE EQUIPMENT: Chemical goggles or shielded safety glasses and rubber or neoprene gloves are not required, but its use is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:Dark brown coldSOLUBILITY:AppreciablepH:5.0-5.5SPECIFIC GRAVITY (Water = 1):1.138g/mlVAPOR PRESSURE:Not establishedPERCENT VOLATILE (by volume): Not applicable

Dark brown colored liquid with sugary, molasses and slight ammonia odor

BULK DENSITY: 9.50 pounds per gallon **BOILING POINT:** Not established **EVAPORATION DATE:** Not established

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

STABILITY: INCOMPATIBILITY: HAZARDOUS DECOMPOSTITION PRODUCTS: HAZARDOUS POLYMERIZTION:

Stable Not known Urea may decompose to release cyanuric acid, ammonia, HCN, NO Will not occur.

11. TOXICOLOGICAL INFORMATION

 Acute Oral LD50(rat): Not established

 Acute Dermal LD50(rabbit): not established

 Eye Irritation (rabbit): not established

 Inhalation LC50(rat): not established

 Skin Sensitiz

 Carcinogenic Potential: None listed in OSHA, NTP, IARC, or ACGIH

Skin Irritation (rabbit): Not established **Skin Sensitization (guinea pig):** not established C, or ACGIH

12. ECOLOGICAL INFORMATION

Drift or runoff may adversely affect non-target plants. Do not apply directly to water. Do not contaminate water when disposing of equipment wash water. Do not apply when weather conditions favor drift from target area.



13. DISPOSAL CONSIDERATIONS

Do not reuse container. Rinse container thoroughly, adding rinsate to mixing tank. Then offer for recycling at an ACRC site (go to http://www.acrecycle.org/ for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Avoid contaminating water by disposal of equipment wash waters or other product wastes.

14. TRANSPORT INFORMATION

DOT Shipping Description:

NOT REGULATED BY USDOT. U.S. Surface Freight Classification: FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI; LIQUID (NMFC 68140, SUB 6)

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:	NFPA 1 Health 0 Flammability 0 Instability	0 Least 1 Slight 2 Moderate 3 High 4 Severe	HMIS 1 Health 0 Flammability 0 Reactivity H PPE			
SARA Hazard Notification/Reportin SARA Title III Hazard Category:	Immediate Y	Fire <u>N</u> Reactive <u>N</u>	Sudden Release of Pressure <u>N</u>			
Reportable Quantity (RQ) under U.S. CERCLA: Not listed SARA, Title III, Section 313: Not listed RCRA Waste Code: Not listed						
16. OTHER						

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REV 021721_ALB