

**MATERIAL SAFETY DATA SHEET**

Agro-K Corporation  
8030 Main Street N. E.  
Minneapolis, MN 55432

General Information No.  
In Case of Emergency, Call  
CHEMTREC 1-800-424-9300

**I. PRODUCT IDENTIFICATION**

Trade Name: Sysstem-Advance SR  
Active Ingredient: Urea, Manganese and Zinc Phosphite Salt Solution with boron and molybdenum

**II. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Compound	CAS Number
Proprietary Fertilizer Blend	None

**III. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**  
**KEEP OUT OF REACH OF CHILDREN**

CAUTION: May cause burns or irreversible damage to skin, eye or respiratory system. Keep out of the reach of children. Avoid prolonged or repeated skin contact. Do not get in eyes, on skin or on clothing. Ingestion may cause burns of irreversible damage to mucous membranes. Exposure to boron can cause digestive tract irritation and may cause central nervous system effects and may cause adverse reproductive effects.

**PHYSICAL OR CHEMICAL HAZARDS**

Do not use, pour, spill or store near heat or open flame.

**ENVIRONMENTAL HAZARDS**

None known.

**IV. FIRST AID MEASURES**

If in Eyes: Hold eyelid 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 eye. Call a poison control center or doctor immediately for treatment advice.

If on Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Drink several glasses of water if able to swallow. Do not give anything to an unconscious or convulsing person.

If Inhaled: 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.

Hotline Number: Have the product container or label with you when calling a poison control center or doctor or going for treatment. In case of emergency, call ChemTrec at 1-800-424-9300.

**Note to Physician:** Probable mucosal damage may contraindicate the use of gastric lavage.

## V. FIRE FIGHTING MEASURES

Flashpoint (method used):	Non Combustible
Flammable Limits:	Not Applicable
Extinguishing Media:	Non-combustible liquid. Use extinguishing media for underlying cause of fire.
Special Fire Fighting Procedures:	Wear self-contained breathing apparatus and full protective equipment. Use water spray to cool containers exposed to heat and flame. Product may produce toxic fumes under fire conditions.
Fire and Explosion Hazards:	Cool containers exposed to heat and flame. Product may produce toxic fumes under fire conditions.

## VI. ACCIDENTAL RELEASE MEASURES

Spill of Leak Procedure:	Capture product, reuse material if uncontaminated. If contaminated, absorb material with an absorbent such as clay or sand and place in a suitable container for proper disposal. Do not contaminate water supplies.
--------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## VII. HANDLING AND STORAGE

### KEEP OUT OF REACH OF CHILDREN!

Do not contaminate water, food, or feed by storage or disposal.

<b>FERTILIZER STORAGE:</b>	Store in a cool, dry place in the original container. Do not store in a manner where cross contamination with other pesticides, fertilizers, food or feed could occur. Protect from freezing.
----------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation:	Local exhaust sufficient.
Personal Protective Equipment (PPE)	
Mixers, loaders, applicators and other handlers must wear:	
	<ul style="list-style-type: none"> <li>• Long-sleeved shirt and long pants</li> <li>• Shoes plus socks, and</li> <li>• Chemical resistant gloves made of any waterproof material</li> <li>• Protective eyewear</li> </ul>
User Safety Recommendations:	Wash hands thoroughly with soap and water before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing.

## IX. PHYSICAL AND CHEMICAL PROPERTIES

Physical description:	Brownish liquid
Odor:	None

Boiling Point:	> 100°C
Specific Gravity:	1.35 GMS/CC
Vapor pressure:	Not established
Vapor density:	Not established
Melting Point:	Not Applicable
Evaporation:	Not established
pH:	2.0-2.5
Water solubility:	99.50%

---

## X. STABILITY AND REACTIVITY

---

Chemical stability:	Stable
Conditions to avoid:	None currently known.
Incompatibility with other materials:	Product may react vigorously with strong alkalis and oxidizers
Hazardous decomposition products:	Oxides of phosphorus, Phosphine
Hazardous polymerization:	Will not occur.

---

## XI. DISPOSAL CONSIDERATIONS

---

Waste Disposal Method: This material must be disposed of according to federal, state, or local procedures under the resource conservation and recovery act.

**FERTILIZER DISPOSAL:** Use according to label instructions, contact your State or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:**

***Nonrefillable container:***

Do not reuse or refill this container. Then offer for recycling if available," or puncture and dispose in a sanitary landfill, or by other procedures approved by state and local authorities. If rinsed cannot be used, follow fertilizer disposal instructions. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 % full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times

## XII. TRANSPORT INFORMATION

Shipping Name: Not regulated by DOT  
 Hazard Class: None  
 Identification No.: None  
 Labels Required: None  
 Placarding: None  
 Freight Class: Compound, fertilizer liquid, NOIBN

National Fire Protection Association Rating

Health: 1
Fire: 0
Reactivity: 1

## XIII. REGULATORY INFORMATION

SARA Title III Hazard Classification: (Yes/No)

Immediate (Acute) Health: Y  
 Sudden Release of pressure: N  
 Reactive: N  
 Delayed (Chronic) Health: N  
 Fire: N

## XIV. OTHER INFORMATION

**DISCLAIMER:** The information presented herein is based on available data from reliable sources and is correct to the best of Agro-K, Corporation knowledge. Agro-K, Corporation makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions.