



NON PLANT FOOD INGREDIENT

ACTIVE INGREDIENTS:

50% 2-propenoic acid, sodium salt, polymer with 2-propenamide
 50% Inert Ingredients
 100% TOTAL

All ingredients are exempt from tolerance requirements under 40 CFR 180.1001 (d)

KEEP OUT OF REACH OF CHILDREN

WARNING

May be harmful if swallowed
 May be harmful in contact with skin
 Causes eye irritation
 Causes mild skin irritation
 May be harmful if inhaled

NET CONTENTS: □ 15 Gallons (56.7 L) SN 040715
 □ 30 Gallons (113.5 L)

F224

MANUFACTURED FOR
HELENA CHEMICAL COMPANY
 225 SCHILLING BOULEVARD, SUITE 300
 COLLIERVILLE, TN 38017
 901-761-0050

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

BEFORE USING THIS PRODUCT, READ ALL PRECAUTIONS, DIRECTIONS FOR USE, CONDITIONS OF SALE-LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES.

May be harmful if swallowed. May be harmful in contact with skin. Causes eye irritation. Causes mild skin irritation. May be harmful if inhaled. Keep product locked up and out of the reach of children. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or smoking tobacco. Remove and wash contaminated clothing before reuse. Do not take internally. Avoid contact with or inhalation of spray application mist if present. Do not apply this product in such a manner as to directly expose workers or other persons. If product is being mixed with pesticides and/or spray adjuvants, follow all precautionary statements on the accompanying product(s) labeling. Not for human or animal consumption.

Personal Protective Equipment (PPE): Wear protective eyewear (goggles or face shield), chemical-resistant gloves, long-sleeved shirt and long pants, and shoes plus socks when using this product. Take off any contaminated clothing and wash before reuse.

FIRST AID

IF IN EYES:	<ul style="list-style-type: none"> Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none"> Call a POISON CENTER or doctor immediately. Rinse mouth. Do NOT induce vomiting. Do not give anything by mouth to an unconscious person. Immediately call a POISON CENTER or doctor.
IF INHALED:	<ul style="list-style-type: none"> Move person to fresh air and keep at rest in a position comfortable for breathing if they feel unwell. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a POISON CENTER or doctor for treatment advice.
IF ON SKIN OR HAIR:	<ul style="list-style-type: none"> Take off immediately all contaminated clothing. Rinse skin with water or shower. Get medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

STORAGE AND DISPOSAL

Storage: Important! Keep from freezing. Store in original container and protect from freezing. If product freezes, thaw completely and mix thoroughly before use. Spills become very slippery when mixed with water.

Container Disposal: Rinse out empty container thoroughly. Dispose of container in an approved landfill or by other procedures approved by state and local authorities.

GENERAL INFORMATION

RESERVOIR® 50 is designed for use as an irrigation management tool for general turf applications on areas such as golf course fairways, athletic fields, commercial lawns, and any other managed turf environments equipped with high volume irrigation systems. The end result is a product that can be used to improve irrigation efficiency.

DIRECTIONS FOR USE

Directly inject desired rates of **RESERVOIR® 50** into the irrigation system during normal irrigation cycles. Please refer carefully to all the details and instructions on this label for specific instructions and consult with your local Helena Chemical Company Sales/Technical Representative for additional information and guidelines pertaining to your hydro-treatment need.

GENERAL RATE AND APPLICATION GUIDELINES

ESTABLISHED TURF

Utilizing **RESERVOIR® 50** in a planned and scheduled management program through the growing season will result in improved irrigation efficiency with shortened water cycles and reduced environmental effects during periods of drought stress. As a planned maintenance program, it is recommended to apply 2-8 pints per acre every 30 days from the first spring mowing operation and with continued treatment through the first fall frost. **RESERVOIR® 50** can also be used as a corrective measure for poor irrigation conditions by utilizing 4-8 pints per acre at 2-week intervals for at least two treatment cycles, or until conditions improve. *Refer to mixing and handling instructions.*

NEW SEEDINGS – STAND ESTABLISHMENT

RESERVOIR® 50 may be injected on the initial watering cycle following a new turf seeding, and will have dramatic effects on the stabilization of the soil structure and improved infiltration. This treatment will reduce runoff and erosion as well as minimize crusting. As a result of better irrigation efficiency, improved soil structure, and better utilization of soil moisture and nutrients, the treatment will result in faster, hardier emergence and stand establishment. For best results, this treatment must be made to freshly seeded, dry soil and injected into the first irrigation cycle. *Refer to mixing and handling instructions.*

RATE CONVERSION MATRIX FOR TURF IRRIGATION APPLICATIONS				
Area to Treat	2 pints/acre	4 pints/acre	6 pints/acre	8 pints/acre
1 acre	32 oz.	64 oz.	96 oz.	128 oz.
30,000 sq. ft.	22.2 oz.	44.4 oz.	66.6 oz.	88.8 oz.
20,000 sq. ft.	14.8 oz.	29.6 oz.	44.4 oz.	59.2 oz.
10,000 sq. ft.	7.4 oz.	14.8 oz.	22.2 oz.	29.6 oz.
1,000 sq. ft.	0.74 oz.	1.6 oz.	2.4 oz.	3.2 oz.

MIXING AND HANDLING INSTRUCTIONS

RESERVOIR® 50 is a concentrated product containing highly active water treatment resins. **RESERVOIR® 50** must be handled and applied carefully to insure trouble free application. As a general precaution, avoid **RESERVOIR® 50** exposure and contact with small amounts of water. Avoid spills and direct contact, as the product is very difficult to wash and clean from the skin or equipment.

INJECTION PROCEDURES FOR RESERVOIR® 50 INTO IRRIGATION SYSTEMS

RESERVOIR® 50 is designed for direct injection into pressurized irrigation systems. Utilizing a Progressive Cavity Pump best completes this process, or alternative injection systems designed for metering small quantities of viscous materials.

IMPORTANT: The injection system utilized for applying this product must meet local safety and regulatory standards for direct injection application. At a minimum, the following general standards must be met prior to using this product.

- The injection system must be interlocked with the irrigation system in so much that the injection system will not operate and/or will shut down immediately upon any failure of the irrigation system. This interlock mechanism can be accomplished through the use of low-pressure switches, flow sensors, or a direct interlocking wiring scheme with irrigation water pumps. The importance of this fail-safe interlock is to prevent unwanted injection of product, excessive application, and/or spill exposure.
- The irrigation system must be equipped with backflow prevention to prohibit the backflow of treated water into the irrigation water source.
- All hoses, clamps, fittings, and seals associated with the injection system must be constructed of materials that are chemically resistant and appropriate for use in the extreme environmental conditions of excessive heat and ultra violet light exposure. Further, the pressure ratings for all such components must be adequate to withstand all operating pressures. Contact your local Helena Representative for more information regarding the details of system specification and/or information about local codes and regulatory standards. Preparation of the injection equipment

Disclaimer: Always refer to the label **on the product** before using Helena or any other product.

is very important to insure that the pump and metering system is clean/dry, and void of water. To insure injection system readiness, follow these instructions carefully.

4. The injection system including induction tubes, all hoses, pumps, fittings, and valves must be completely dry - small amounts of water in the injector tank will "gel" when exposed to **RESERVOIR® 50** causing problems with injector performance. **NOTE: RESERVOIR® 50** is designed for direct injection from the original drum package. Utilizing a drawtube and direct injection from the package minimizes exposure to unwanted moisture.
5. Purge the injection system with a Crop Oil Concentrate such as **Agri-Dex®** to insure that all excess moisture is flushed from the system. This purging process should also be used to prime/calibrate the system, and generally test that the system is operating properly. **IMPORTANT:** Utilize this step to test the fail-safe interlock with the irrigation system.
6. Turn on the sprinkler/irrigation system and confirm water flow before initiating **RESERVOIR® 50** injection.
7. Always confirm that operation of injection equipment ceases as designed upon completion of an irrigation cycle or injection period.

NOTE: Do not calibrate equipment with **RESERVOIR® 50**. Utilize a Crop Oil Concentrate such as **Agri-Dex®** to calibrate and test injection equipment. This process will avoid the mess and nuisance handling problems that can result from contact and exposure with the concentrated product.

TO AVOID EXCESSIVE APPLICATION WITHIN PRESSURIZED IRRIGATION SYSTEMS, RESERVOIR® 50 SHOULD NOT BE MIXED AT RATES WHICH EXCEED 50 PPM WITH WATER VOLUMES, REFER TO THE FOLLOWING FOR 50 PPM RATE LIMITATIONS:

RESERVOIR® 50 Dose	Gallons of Water
50 gallons	1,000,000
25 gallons	500,000
12.5 gallons	250,000
5 gallons	100,000

NOTE: If irrigation volumes and rate selection exceed the 50 ppm dose limitations, then rate application should be split into multiple irrigation cycles.

CONDITIONS OF SALE-LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

Read the Conditions of Sale-Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

This label is believed to be reliable and must be followed carefully. Injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Chemical Company's election, one of the following:

1. Refund of the purchase price paid by buyer or user for product bought, or
2. Replacement of the product used

To the extent allowed by law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

© Copyright Helena Holding Company, 2015

RESERVOIR® and **Agri-Dex®** are registered trademarks of Helena Holding Company.