

**DIRECTIONS FOR USE**

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Grain SHIELD is a fungicide for the control of molds and fungi on high-moisture grains. Use Grain SHIELD on corn, oats, barley, wheat and sorghum. Read the entire label. Use strictly in accordance with precautionary statements and directions for use. Do not use on grain that may be used for seed or malting.

Determine the moisture content of grain and treat within 4 hours of harvest for on farm storage and/or prior to transport and storage. Apply in the form of a spray. Properly calibrate the KEMIFLO® applicator (or other applicator equipment compatible with propionic acid usage) before applying Grain SHIELD. Use this product at recommended rates given.

**RECOMMENDED RATE OF Grain SHIELD PER TON OF MOIST CORN, SORGHUM, WHEAT, OATS OR BARLEY IN COVERED STORAGE\***

Duration	Moisture Content, Percent by Weight		
	Below 15.5%	15.5-20%	21-30%
Up to 4 weeks*	2 lbs/ton	4 lbs/ton	8 lbs/ton
Up to 6 months*	4 lbs/ton	8 lbs/ton	12 lbs/ton
Up to 12 months	6 lbs/ton	12 lbs/ton	16 lbs/ton

\* Not recommended if grain is to be kept in storage beyond May 1.

Wood and concrete structures are ideal covered storage facilities for Grain SHIELD-treated grain. Do not store in upright tile, stave, or concrete bunker silos, or on the ground in plastic covered piles. Protect metal and concrete surfaces against corrosion. Be sure all concrete or dirt floors are covered with plastic (4-6 mil thickness). Seal and construct pit or trench storage areas to prevent water entry.

**RECOMMENDED RATE OF Grain SHIELD PER TON OF MOIST CORN, SORGHUM, WHEAT, OATS OR BARLEY IN OPEN STORAGE\*\***

Duration	Moisture Content, Percent by Weight		
	Below 15.5%	15.5-20%	21-30%
Up to 4 weeks	4 lbs/ton	6 lbs/ton	10 lbs/ton
Up to 6 months	8 lbs/ton	12 lbs/ton	16 lbs/ton
Up to 12 months	12 lbs/ton	18 lbs/ton	24 lbs/ton

\*\* It is recommended that open storage shall be limited to the following areas of low precipitation: Nebraska (excluding S.E. corner), Western Kansas, Western Oklahoma, Texas Panhandle, Eastern New Mexico, Eastern Colorado and S.E. Wyoming. All such grain must be fed out before May 1 of the following spring.

Acceptable outdoor storage areas are bunkers, pits, or slabs with concrete or asphalt floors, do not store grain on dirt surfaces. Dirt or wooden walls must be lined with plastic. Do not cover grain surface. Seal and construct storage areas to prevent water entry and slope floor area for drainage. Store in long, rounded piles.



**Grain SHIELD®**  
**LIQUID**

**PRODUCT 14719**

A fungicide for the control of molds and fungi in high-moisture grains.

ACTIVE INGREDIENT: Propionic Acid .....70.5%  
INERT INGREDIENTS: .....29.5%  
TOTAL .....100%

This product contains 9.02 lbs Grain SHIELD per gallon.

FOR HIGH MOISTURE GRAIN  
- EASY TO USE -

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

PRECAUTIONARY STATEMENTS  
Hazards to Humans and Domestic Animals

**DANGER**

Corrosive: Causes irreversible eye damage. Harmful if absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. Wear long-sleeved shirt and long pants, socks and shoes, goggles or face shield and chemical resistant gloves such as Nitrile, Butyl, Neoprene, and/or Barmer Laminate. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

**ENVIRONMENTAL HAZARDS**

For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark.

**FIRST AID**

IF IN EYES: Hold eyelids 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 eyes. Call a poison control center or doctor for treatment advice. 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.

**KEMIN INDUSTRIES, INC.**

2100 Maury St., Box 70  
Des Moines, IA U.S.A. 50301-0070

EPA Registration No. 8596-33  
EPA Est. 85964A-001

24-hr. Emergency Contact: Chemtrec (800) 424-9300

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 treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.  
Note to physician: Probable mucosal damage may contraindicate use of gastric lavage.

**TO SUCCESSFULLY STORE GRAIN, THE FOLLOWING MANAGEMENT STEPS MUST BE FOLLOWED:**

1. Remove all leaf and stem particles from grain before storing.
2. Clean all storage areas and harvesting machinery of old grain and dirt.
3. Treatment inhibits germination. Do not use on seed which might be used for seed or malting. Grains treated with propionic acid may be classified as 'sample grade' due to odors from chemical treatment.
4. Apply an approved anti-corrosive and acid-resistant coating to all metal and concrete storage surfaces to prevent corrosion.
5. Do not treat in the rain. If rain does fall on untreated grain, allow the rain to soak into the pile and test for moisture content before continuing treatment.
6. Apply in the form of a spray as directed and wash applicator equipment thoroughly with water after each use.
7. Do not mix treated grain and untreated grain or forages in the same storage area.
8. Do not store treated grain on bare dirt floors.
9. Check grain in storage frequently for signs of heating internally or moisture build-up on the surface. Aeration must be available.
10. Follow established management practices in the handling and storage of grain.

**STORAGE AND DISPOSAL**

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

PESTICIDE STORAGE: Store in a warm, dry place above 40° F to prevent freezing.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Triple rinse (or equivalent) then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or incineration or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**WARRANTIES**

The manufacturer makes no warranties, expressed or implied, concerning the product or its use which extend beyond the description on the face hereof. All statements made concerning this product apply only when used as directed.

The manufacturer neither makes nor authorizes any agent or representative to make any other warranties including warranties of fitness for a particular purpose or merchantability, guarantee or representation concerning this material. This product is sold only on the basis that the buyer assumes all risks of use or handling which result in loss or damage and which are beyond the manufacturer's control.

No claim of any kind, whether or not based on negligence, shall be in greater amount than the purchase price of the material in respect of which such a claim is made. In no event shall manufacturer or seller be liable for special, indirect or consequential damages resulting from the use or handling of this material.

This warranty does not extend to and the buyer shall be solely responsible for, any and all loss or damage which results from the use of this product in any manner which is inconsistent with the label directions, warnings, or cautions.

Questions? (800) 777-8307.

PRODUCT COLOR CHANGE WILL NOT AFFECT PERFORMANCE.

LOT NO. 12345

MFG. DATE: JUL 00



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**NET WT. 50 gallons (450 LB - 204.12 KG)**

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09/19/2000

1/2

2/2

ACCEPTED  
09 SEP 2000  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under  
EPA Reg. No. 5576-33