



PROPIONIC ACID

AN INHIBITOR FOR CONTROL OF MOLDS AND FUNGI IN HIGH-MOISTURE STORED CORN, OATS, BARLEY, WHEAT OR SORGHUM TO BE USED AS LIVESTOCK OR POULTRY FEED

Active Ingredient: Propionic Acid*	99.5%
Inert Ingredients:	0.5%
		100.0%

*This product meets specifications as set forth in the Food Chemicals Codex Compendium.

ACCEPTED

JAN 19 1996

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, this pesticide is registered under EPA Reg. No. 10352-46

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER
KEEP OUT OF REACH OF CHILDREN**

CORROSIVE: CAUSES SKIN BURNS AND IRREVERSIBLE EYE DAMAGE. HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.

Do not get in eyes, on skin, on clothing. Do not swallow. Avoid breathing vapors or mist. Wear safety goggles and/or face shield. Wear protective clothing and chemical resistant gloves. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Avoid working near high concentrations of spray mist/vapor. Use adequate ventilation. Wear chemical resistant gloves, chemical resistant aprons, chemical resistant footwear and goggles or face shield when loading application equipment unless a closed loading system is used.

PHYSICAL AND CHEMICAL HAZARDS

Combustible: Keep away from heat and open flame.

ENVIRONMENTAL HAZARDS

Keep out of lakes, streams and ponds. Do not apply directly to water, to areas where surface water is present or to inter tidal areas below the mean high water mark. Do not contaminate water by disposing of equipment wash water.

**KEEP OUT OF REACH OF CHILDREN
DANGER**

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Do NOT remove contact lenses, if worn. Get immediate medical attention.

IF ON SKIN: Immediately wash with plenty of soap and water. Get medical attention.

IF INHALED: Remove victim to fresh air. If breathing is difficult, give oxygen. If victim is not breathing, give artificial respiration. Get medical attention.

IF SWALLOWED: DO NOT INDUCE VOMITING. Rinse mouth immediately with abundant quantities of water, then drink promptly a large quantity of water. Get medical attention immediately.

Note to physician: Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage.

UNION CARBIDE CORPORATION

39 Old Ridgebury Road • Danbury, CT 06817-0001

EPA Reg. No. 10352-46

Made In USA

NET CONTENTS:

EPA Est. No. _____

PC-70810 / PE1295

_____ LBS., _____ GALS.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its label.
Read entire label. Use strictly in accordance with precautionary statements and directions for use.

General Directions

Use treated grain for animal feed only. Treatment inhibits germination; do not use on grain intended for seed, malting, or for use in human foods. Grain preserved with propionic acid is classified as "sample grade" due to persistent odors from chemical treatment.

Do not store treated grain with untreated grain or forage in the same storage area. Thoroughly clean all storage areas prior to use.

Apply anti-corrosive paint to all metal and concrete storage surfaces to prevent corrosion and grain molding due to acid neutralization.

Determine moisture content of freshly harvested grain and treat within 4 hours of harvest. Adjust treatment rate as detailed below depending on moisture content and type or length of storage.

Do not treat in the rain. Allow rain to soak into the pile and test for moisture content before continuing treatment.

Thoroughly mix acid and grain by spraying acid on grain in auger while moving to storage. Stop auger immediately if spray failure occurs. Establish auger throughput and use flowmeter to apply proper rate of acid.

Apply this product only at the recommended rates.

Flush out application and handling equipment with water after acid application is completed.

Follow all General Directions given above.

Protect grain from outside moisture in metal or wooden bins, converted cribs, Quonset huts, or other roofed buildings.

Waterproof floor; ventilate headspace to prevent condensation in storage area.

Do not store in upright tile, stave, or concrete silos, bunker silos, or on ground in plastic-covered piles.

Follow normal aeration procedures to prevent moisture condensation and migration.

Use the treatment rates as given in the following tables:

RECOMMENDED RATES OF PROPIONIC ACID/TON OF MOIST CORN IN COVERED STORAGE

Duration of Storage	Moisture Content of Corn, Percent by Weight		
	up to 20%	21 to 30%	31 to 35%
Up to 6 months	8 lbs. or 1 gallon	12 lbs. or 1½ gallons	16 lbs. or 2 gallons
Up to 12 months	12 lbs. or 1½ gallons	16 lbs. or 2 gallons	20 lbs. or 2½ gallons

*Not recommended if grain is to be stored after May 1

RECOMMENDED RATES OF PROPIONIC ACID/TON OF MOIST SORGHUM, WHEAT, OATS OR BARLEY IN COVERED STORAGE

Moisture Content of Grain, Percent by Wt.	Rate of Propionic Acid for Covered Storage of Moist Grains	
	lbs. acid/ton of grain	gals. acid/ton of grain
16	11	1.3
18	13	1.6
20	15	1.8
22	17	2.0
24	19	2.3
26	21	2.5
28	23	2.8
30	25	3.0
32	27	3.3
34	29	3.5
36	31	3.7

*These rates protect stored sorghum, wheat, oats or barley up to 12 months.

Follow all General Directions given above.

Unprotected large pile storage is recommended *only in the following areas* of low-precipitation: Nebraska (excluding SE corner) Western Kansas, Western Oklahoma, Texas Panhandle, Eastern New Mexico, Eastern Colorado and SE Wyoming.

Corn grain stored in this manner must be fed out before May First.

Bunkers, pits, or slabs are accepted storage facilities, provided:

- the floors are concrete or asphalt; do not store grain on dirt surfaces.
- any dirt or wood walls should be lined with plastic; do not cover grain surface with plastic.
- seal and construct storage areas to prevent water entry; slope floor area for drainage.

Plan storage for maximum access. Feed out corn along one side of bunkers or pits; or by rotation around slab piles.

Use the following treatment rates, testing moisture content of each load and treating within 4 hours of harvest. Do not treat or store grain over 28% moisture content.

Moisture Content of Grain, Percent by Wt.	Rate of Propionic Acid for Open Storage of Moist Corn	
	lbs. acid/ton corn	gals. acid/ton corn
16	11	1.3
18	13	1.6
20	15	1.8
22	17	2.0
24	19	2.3
26	21	2.5
28	23	2.8

Treated grain should be stored in long, rounded piles. Avoid peaks and valleys. Smooth footprints and other depressions.

Temperature Monitoring. Sharp increases in grain temperature signal potential spoilage. Thermocouple or hand temperature probes are suggested. They may be placed at various spots around the pile and should be read weekly. Localized melting of snow or frost, steam, and seepage are other indicators of spoilage.

STORAGE AND DISPOSAL

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, (non-aerosol) or by other procedures approved by state and local authorities.

LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions; and (c) that the directions, warnings and other statements on this label are based upon responsible experts' evaluation of reasonable tests of effectiveness and of toxicity to laboratory animals. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE, ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. 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.

BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT SUCH LIABILITY IS BASED ON CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

EMERGENCY CONTACT: (24 HOURS PER DAY) IN USA 1-800-UCC-HELP (1-800-822-4357)
OUTSIDE USA: 01-304-744-3487