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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Maureen Miksztal
Senior Regulatory Specialist
The Dow Chemical Company
171 River Road
Piscataway, NJ 08854

AUG 1 2003

Subject: Propionic Acid
EPA Reg. No. 464-711
Submissions dated December 11, 2002 and May 23, 2003

Dear Ms Miksztal:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended is acceptable provided the following changes are made:

- In the **STORAGE AND DISPOSAL** block, move the sentence "Do not contaminate water, feed or food by storage or disposal" from the line after the "Pesticide Storage" subheading to a position above the subheading "Pesticide Storage."
- In the **DIRECTIONS FOR USE** section, add a subtitle such as "STORAGE OF COWPEA HAY, PEANUT HAY, PEAVINE HAY AND SOYBEAN HAY" before the last paragraph "Propionic acid is applied undiluted to hay"

One copy of the label stamped "Accepted with comments" is enclosed for your information.

Please submit one copy of the final printed label before the product is released for shipment.

The alternate Confidential Statement of Formula dated December 11, 2002 submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended is acceptable. This alternate CSF will be added to the regulatory file.

You have requested the Agency to add an alternate brand name. The alternate brand name "Propionic Acid Grain Preserver Grade" has been placed in the file for this product. The primary name of record is still "Union Carbide Propionic Acid." If you wish to change the name of the product in the future, you may put in a request for a new primary brand name.

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If you have any questions, please contact Robert Westin by phone at (703) 305-5721 or via email at westin.robert@epa.gov.

Sincerely,



Cynthia Giles-Parker
Product Manager (22)
Fungicide Branch
Registration Division (7505C)

Enclosure

PROPIONIC ACID

An inhibitor for control of molds and fungi in cowpea hay, peanut hay, peavine hay and soybean hay and 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%
	<u>100.0%</u>

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

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER KEEP OUT OF REACH OF CHILDREN

CORROSIVE: CAUSES IRREVERSIBLE EYE DAMAGE AND SKIN BURNS. HARMFUL AND CORROSIVE IF SWALLOWED. HARMFUL IF 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.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Do not discharge effluent containing this active ingredient into lake waters unless this product is specifically identified and addressed in a NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of EPA.

PHYSICAL AND CHEMICAL HAZARDS

COMBUSTIBLE Keep away from heat and open flame

KEEP OUT OF REACH OF CHILDREN DANGER FIRST AID

If in eyes:

- Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing.
- Obtain prompt medical consultation, preferably from an ophthalmologist.

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 a doctor for treatment advice.

If inhaled:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible.
- Call a poison control center or a doctor for further treatment advice.

If swallowed:

- Call a poison control center or a doctor immediately for treatment advice.
- Give one cup (8 ounces or 240 mL) of water or milk if available and transport to a medical facility.
- **DO NOT INDUCE VOMITING.**
- Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage.

Have the MSDS, and if available, the product container or label with you when calling a poison control center or a doctor, or going for treatment.



THE DOW CHEMICAL COMPANY

Midland, Michigan 48674 U.S.A.
1-800-258-CHEM

*Trademark of The Dow Chemical Company

NET CONTENTS:

**ACCEPTED
with COMMENTS
In EPA Letter Dated:**

AUG 1 2003

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.

464-711

EPA Reg. No. 464-711
EPA Est. No.
Made In USA
PC-70810 / PE0503

____ 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 or 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 set 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.

WEATHERPROOF STORAGE OF HIGH-MOISTURE GRAINS

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 1.5 gallons	16 lbs. or 2 gallons
Up to 12 months	12 lbs. or 1.5 gallons	16 lbs. or 2 gallons	20 lbs. or 2.5 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.

OUTDOOR STORAGE OF HIGH-MOISTURE CORN GRAIN ONLY

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.

Propionic acid is applied undiluted to hay with a low-pressure spray system equipped with adequately arranged and calibrated nozzles to hay just prior to baling and stacking. The application rate is 8 - 31 pounds/ton of the active ingredient.

STORAGE AND DISPOSAL

Pesticide Storage:

Keep away from heat and open flame. Keep container closed during storage. Do not contaminate water, food, or feed by storage or 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

Seller warrants that the product conforms to its chemical description as contained on this label and is reasonably fit for the purposes stated on this label when used in accordance with directions under normal conditions of use. THE WARRANTIES MADE IN THIS PARAGRAPH ARE SELLER'S SOLE WARRANTIES WITH RESPECT TO THE PRODUCT AND ARE MADE EXPRESSLY IN LIEU OF AND EXCLUDE ANY IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER EXPRESS OR IMPLIED REPRESENTATIONS AND WARRANTIES.

IN CASE OF AN EMERGENCY endangering life or property involving this product, call collect
989-636-4400