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ICBERRY:mtw
September 7, 1967

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Sinbar

Three Generation Rat Reproduction Study Method

30 male and 60 female albino rats were used for this study. The rats were divided into one control and two test groups of ten males and twenty females each and were selected and grouped in such a manner that the average group body weights were similar for each sex. Herbicide 732 was incorporated into the standard powdered laboratory diet of Purina Laboratory chow at concentrations of 50 or 250 ppm of the active ingredient. The control group of rats received the same powdered diet of Purina Laboratory chow but without Herbicide 732. After an initial 100 days period of feeding all the control and test rats were mated for 21 days by housing two females with one male throughout the study. After the three week mating period the rats were separated again and individually housed. Three weeks were allowed for gestation and an additional three weeks for nursing prior to weaning. Following the five day period of rest after weaning the parental rats were again mated as above except that a different male was paired with two females within each respective group. As in the first breeding cycle three weeks were allowed for mating, three weeks gestation, and three weeks for nursing the pups prior to weaning. The pups from the first mating (F_{1a}) were examined for abnormalities and sacrificed. Representative pups were necropsied and examined for gross signs of pathology. After weaning the pups from the second litter (F_{1b}) the parental (P_1) rats were sacrificed and discarded. Selections

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were made of 20 females and 10 male rats from each respected group of the F_{1b} litter to serve as the second (P_2) generation parental rats. The remaining pups in each group were examined for abnormalities and discarded. Selective pups were necropsied and examined grossly for signs of pathology.

Second Generation (P_2)

After weaning the F_{1b} pups which were selected for the P_2 generation were continued on a diet for 100 days and then mated in the same manner described above for the P_1 generation. The pups from this mating (F_{2a}) were examined for abnormalities and sacrificed. Representative pups were necropsied and examined for gross signs of pathology. After a five day rest period the rats were again mated as described above. The F_{2b} offspring were nursed for 21 day and then weaned. The P_2 parental rats were sacrificed and discarded. Selections were made of 20 females and 10 males from each respected group of the F_{2b} litter to serve as the third (P_3) generation parents. Remaining pups in the F_{2b} litter were examined for abnormalities, sacrificed and discarded. Representative pups were necropsied and examined grossly for signs of pathology.

Third Generation (P_3)

After a 100 days of feeding the test diet the F_{2b} control and test groups of rats were mated and two litters raised in identical fashion in that described above. The first litter (F_{3a}) was sacrificed and discarded.

Representative pups in the F_{3a} litters were necropsied and examined for gross pathology. After weaning the F_{3b} litter one female and male pup from each of ten litters from the control and test groups were sacrificed, necropsied and representative tissues selected for histopathologic examination. The usual observations were made on a daily and weekly basis and in addition specific observations were made during and after each breeding cycle for abnormalities in reproduction and teratogenesis.

Results

General behavior and appearance--No unusual alterations and behavior in appearance were observed in any of the three generations of parental rats in the study. Both sexes of all three generations exhibited an occasional oral ocular and/or nasal porphyrin discharge and respiratory congestion. In addition, an occasional animal in the control and test groups exhibited an odd formed mass at various sites on the body surface. Also seen was an occasional incidence of alopecia. No signs however, were seen which could be related to the feeding of Herbicides 732 in the diet.

Body weights P_1 generation rats--The gain in body weight of the male rats in both of the test groups in the P_1 generation was slower than the control male rats. Differences in group body weight between control and test groups did not exceed 15%. There was no apparent dose relationship.

Female rats in the test group of the P_1 generation compared favorably with the control rat group throughout this portion of the study.

P_2 Generation Parental Rats--the gains in body weight exhibited by the female rats in both test groups and the male rats at the 50 ppm dietary level of Herbicide 732 was slightly less than the control rat. The difference did not exceed 10% of any point in this period of the study. The male rat group at the 250 ppm dietary level of Herbicide 732 exhibited a significant difference in body weight in the control rat group from the 41st week of the study onward. This difference obtained a maximum of 17.2% in the 67th week.

P_3 Generation Parental Rats--male rats in the 50 ppm test group and female rats in both test groups exhibited weight gains during the third generation which compared favorably to their respective control rat groups. Male rats at the 250 ppm dietary level exhibited a 10% inhibition in body weight gain as comparison to the P_3 control male rat group in the 82nd week of the study. This difference increased to 15% in 87th week with a plan to work for the remainder of this phase of the study.

Survival

In the P_1 generation two control rats, one male rat at the 50 ppm level and two male rats at the 250 ppm dietary level did not survive this study. One control female rat and three female rats of the 50 ppm dietary level also did not survive on the P_1 generation. All female rats at the 250 ppm dietary level survived this study.

In the P_2 generation only one male control rat did not survive the study. One male rat at the 50 ppm dietary level and three control female rats in the P_3 generationd did not survive the study.

Food Consumption

Male parental rats at the 250 ppm dietary level appeared to eat slightly less food in grams per rat per week, but not in grams/kg/day in all generations in this study. No meaningful differences in food consumption were found between control and test male rats at the 50 ppm dietary level, or between the control and either test group of female rats in any of the three generations of parents.

Breeding Cycle

Reproduction -- Data obtained from both breeding cycles of all three generations did not reveal abnormalities relative to fertility of the parental male and female rats, development of the embryo and fetus, abortion, delivery, live births, size of the litters, viability of the newborn, survival of the pups to weaning or growth of the pups during the nursing period.

The fertility index of the female rats at the 250 ppm dietary level during the F_{2B} mating was found to be lower than the control female rats; however, the index for this group of test rats is well within the range which has been obtained from control female rats in the second litter mating from many similar studies in this laboratory.

Summary

Two Year Feeding Study in Albino Rats

1st Control	36	36
2nd Control	36	36
# 1 Test	36	36
# 2 Test	36	36
# 3 Test	36	36
	180	180

Three Test Groups

#1 50 ppm

#2 250 ppm

#3 2500 ppm - after 28 weeks ↑ every 2 weeks by 500 ppm to 5000 ppm by 36 weeks - then ↑ every 2 weeks by 1000 ppm to 10,000 ppm by 46 weeks - then 10,000 ppm maintained.

Results

No adverse compound related behavior or appearance changes

and ♀ at 2500-10,000 ppm level exhibited significantly lower rate of body weight gain (maximum 24-27% (♂); 14-17% (♀))

No changes in food consumption

No changes in LFT, U/A or CBC

No compound related gross pathological leisons at necropsy

Only compound related variation in organ weight was a slight ↑ in liver weight in rats at the 2500-10,000 ppm level after two years.

Compound related histologic changes at one year were limited to the livers of rats at 250 ppm and 2500-10,000 ppm i. e. hepatocyte vacuolation and/or hypertrophy.

And at 2 years the only liver changes (as above) were seen in the rats from the 2500-10,000 ppm group and not the 250 ppm group.

There was no indication of any compound related carcinogenic effect at any dietary level.

Teratogenesis

Gross examination of those pups surviving at weaning from both litters of all three generations did not reveal any evidence of abnormalities.

Terminal Pathological Studies

F_{3B} litter--Extensive gross and microscopic examinations revealed the following, gross pathology in organ weight; no compound related gross pathologic leisons were observed at necropsy and pups from either treated group. Because of the wide variations in weights of individual pups from both the control and treated groups no significance was attached to slight variations in relative mean organ weights between these groups. Although some of the relative organ weights expressed as per cent body weights seemed to increase with increase in dose it must be recalled that the body weights, especially at 250 ppm, had decreased and this would falsely elevate the per cent body weight organ weights.

Gross Pathology

No compound related histopathologic leisons were observed in any tissues examined from any pups from either treated group, however, in the control at 50 ppm group there was slight hepatocyte vacuolation and/or hematopoesis noted in the liver. In the 250 ppm, in addition to slight hepatocyte vacuolation and hematopoesis there are two recorded incidences of slight portal lymphocytic infiltration. One of the recorded cases of hepatocyte vacuolation was treated as moderate in one of the B_1 female rats. The changes in the 50 and 250 ppm groups are probably not any more striking than the changes in the control group.

Two Year Feeding Study in the Albino Rat

Methods

180 male and 180 female albino rats were used for this study. The animals were divided into two control groups and three test groups of 36 male and 36 female rats each. Herbicide 732 was incorporated into the standard powdered laboratory diet. Compound in the diet was prepared in such a manner that the rats received Herbicide 732 (80% wettable powder) at dietary levels equivalent 50, 250 or 2500 ppm of the active ingredient. Begining in the 28th week of the study the dietary levels of the compound of the group receiving the highest concentration (2500 ppm) was increased every two weeks by 500 ppm increments until a dietary level of 5,000 ppm was reached in the 36th week study. Thereafter the dietary levels were increased by 1,000 ppm increments every two weeks until 10,000 ppm was attained in the 46th week of study. The latter concentration was maintained for the duration of the study.

Control and test animals were observed daily for mortality, alteration in general appearance and behavior, and gross signs of pharmacodynamic and/or toxic effects.

Body weights, food consumption, and compound consumption values were measured weekly for the first 27 weeks and at biweekly intervals thereafter.

The usual hematologic studies were performed at regular intervals throughout the 24 months of feeding. SGOT, SGPT and plasma alkaline phosphatase studies were performed at the same intervals.

Urinalysis were performed at the same intervals.

Results

General Behavior and Appearance--No adverse compound induced alterations in behavior and appearance were observed at any of the dietary levels during the study. Incidental findings, however, involved the incidence of occasional pneumonia in the test animals, eventually necessitating therapy with penicillin and Streptomycin. Therapy was successful. Post treatment incidence and severity of the disease was much less. Nodules and masses appeared on the body beginning in the fifth month of the study and gradually increasing in incidence in all groups thereafter, particularly in the second year of the study.

Body Weights

Male rats in the 50 and 250 ppm dietary levels compared favorably with respect to body weight to the two control groups throughout the period of the study.

Male rats at the 2500-10,000 ppm dietary level exhibited gains in mean body weight comparable to both control groups during the first year of the study. A slight decrease in body weight was exhibited from the 67th week to the termination of the study. This group exhibited a 10% or greater decrease in mean body weight in control groups from the 65th to the 101st week of the study. A maximum decrease of 17% occurred

during the 89th week of feeding.

Female Rats

The test groups of female rats at the 50 and 250 ppm dietary levels exhibited essentially similar gains in mean body weights as the two control groups throughout the two years of feeding the test compound.

Female rats at the 2500-10,000 ppm dietary levels exhibited mean body weights which were much less than those of the control groups. This difference appeared early in the study and gradually increased through the 81st week. On decreases of 23 and 27% respectively were observed at the termination of the study the females rats at the 2500-10,000 ppm dietary levels weighed approximately 20-24% less than the control groups of female rats.

Food Consumption etc.

No meaningful differences in food consumption were found between the control groups and the test groups of rats used for this study.

Survival

No significant differences were found between the control and test groups of rats of either sex with respect to mortality in this study.

Laboratory Tests

Hematology--No compound related abnormalities were revealed.

Biochemistry--No compound related alterations were noted.

Urinalysis--No unusual alterations in urinalysis were seen.

Incidental findings not considered to be related to the feeding of the test compound included an occasional positive reaction for occult blood and albumin. These occurred with similar frequency in the control and test groups of rats. Albuminuria is a common finding in the urine of the laboratory rat, the significance of which remains obscure.

Pathological Studies

Methods

Gross Observations

After one year of feeding, sufficient rats from each dietary level were sacrificed by decapitation to reduce group numbers in each group to 30 of each sex. All surviving rats were sacrificed after two years of feeding the compound. All rats that were sacrificed or died on study were subjected to necropsy examination, unless precluded by autolysis. Major organs were weighed and representative tissues were collected. The usual microscopic observations were made including brains, spinal cord and peripheral nerve sections.

Masses and grossly undiagnosed lesions from lower dietary levels sacrificed at two years or from rats from any group which died during the study were also processed and and examined microscopically.

Results

No compound-related gross pathologic lesions were observed in rats which died during the study or were sacrificed after one or two years.

Of note in the necropsy observations in the two year sacrificed animals is the high incidence of enlarged or hemorrhagic pituitary glands, most marked in the females but having the approximate same incidence between control and test group animals. Also noted was an approximate 25% incidence of subcutaneous abdominal masses in both control and test group animals. A higher number of deaths due to pneumonia was noted in both test and control animals. Nephritis was noted. The only compound related variation in organ weights was a slight increase in liver weight among rats in the 2500 to 10,000 ppm level sacrificed after two years of study.

Histopathology

Compound related microscopic changes were found only in the livers of rats from 2500 to 10,000 ppm and 250 ppm dietary groups sacrificed after one year of feeding and only in livers of rats on the 2500 to 10,000 ppm levels sacrificed after two years of feeding. These changes consisted of enlargement of centrolobular hepatocytes with the usual coarse granularity of the cytoplasm replaced by cytoplasm which was more hemogeneous but still contained some coarse granules. Nuclei of these cells often appeared larger than normal hepatocyte nuclei. In many rats, primarily females the enlarged hepatocytes contained one to several spherical vacuoles within the cytoplasm.

Although compound related liver changes were seen in one of four rats from the 250 ppm dietary level after one year of compound feeding, no compound related liver changes were found in any of the 22 rats from this level which were sacrificed after two years.

Although liver masses were described at the two year sacrifice in some control and treated rats, these lesions in all cases were hyperplastic nodules and there was no indication of compound related carcinogenesis of liver or other tissues associated with the feeding of this material to rats. There was not an increase incidence of portal lympocytic infiltrate, focal necrosis, bile duct proliferation, bile duct cyst, nodular hyperplasia, telangiectasia, reticulum cell sarcoma in the liver. Extreme arteritis was noted in the pancreas of one of the 2500 to 10,000 ppm test group animals. This finding was probably not of significant interest. In the incidence of neoplasms by site (Table 62) is the relatively high incidence of mammary fibroid abnormal or with the incidence of the control group was the same or less as the incidence in the test animals.

Summary

Two Year Feeding Study in the Dog

16♂ and 16♀ Beagles
80% wettable powder used

1 Control		4♂ 4♀
1st Test	50 ppm	4♂ 4♀
2nd Test	250 ppm	4♂ 4♀
3rd Test	2500 ppm (→ 10,000)	4♂ 4♀

Results

No changes in appearance or behavior

No changes in food consumption, etc.

No laboratory changes

No compound related gross or microscopic pathologic

Slight increase in relative liver weight in 2500-10,000 ppm group at one and two years.

Two Year Feeding Study in the Dog

In the two year feeding study young purebred male and female Beagle dogs four to six months old were fed diets containing Herbicide 732 (80% wettable powder) at levels of 50, 250, or 2500 ppm of the active ingredient. The upper dietary level was periodically increased from the 26th to the 46th week of the study to a final concentration of 10,000 ppm. All the animals had periodic physical examinations, individual food consumption and individual body weight measurements weekly. After 12 months of compound administration one male and one female dog and the control in each of the test groups were sacrificed and necropsied. The rest of the dogs were continued on studies for the entire period. Periodic hematological and 24 hour urine studies were obtained. Periodic blood glucose, total protein, total albumin BUN, BSP, alkaline phosphatase, prothrombin time, SGOT and SGPT, plus cholesterol determinations were done. Complete urinalysis were done on the 24 hour samples periodically.

Results

Behavior, Appearance, and Mortality

No adverse compound-related alterations in behavior or appearance occurred among any of the control or treated dogs used for this study. No mortalities occurred during the two year course of treatment.

Physical Examination

Essentially WNL throughout the study.

Body Weight

The usual fluctuations were noted. There was no evidence obtained in this study of an adverse influence of the test compound on body weight, even at the 2500 - 10,000 ppm dietary level.

Food Consumption

Food consumption was stable. Average daily water intake and urine output was stable.

Laboratory Tests

Hematology

No unusual alterations in hematology were seen in any of the test dogs at any period of examination during this feeding study which could be attributed to the compound effect.

Incidental changes involved a neutropenia and lymphocytosis in one dog at the 250 ppm level, and elevation in bands in seven of eight dogs at 2500 -10,000 ppm dietary level after one month. This elevation was transient.

Biochemical Studies

The only impressive liver function tests were elevations of alkaline phosphatase activity at 18 months or 24 months in four of the eight dogs at the 2500-10,000 ppm level. One control dog also exhibited elevated alkaline phosphatase activity. Other liver functions tests including enzyme studies exhibited WNL throughout the study in particularly these were WNL during the periods of elevated alkaline phosphatase.

Urinalysis

Qualitative and quantitative analysis of the urine specimens obtained from the control and test dogs at specific intervals during this feeding study did not reveal changes suggestive of a compound effect.

The usual bilirubin, or albumin, was noted.
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Pathological Studies

The usual gross examination and microscopic examination was done including specimens of liver and kidneys from the 250 ppm dietary level was sacrificed after one year.

Results

Gross Pathology and Organ Weights

No compound related gross pathologic lesions were seen at necropsy examination in any of the treated dogs which were sacrificed after one or two years of compound administration.

Compound related variations in organ weights were limited to a slight increase in relative liver weight observed in dogs from the 2500-10,000 ppm group. This increase was seen at both the one and two year sacrifices.

Histopathology

No compound related microscopic changes were seen in the tissues.

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U. S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
PESTICIDES REGULATION DIVISION
WASHINGTON, D. C. 20250

INTERDEPARTMENTAL COORDINATION OF ACTIVITIES RELATING TO PESTICIDES

Referral of Application for Registration under the Federal Insecticide, Fungicide, and Rodenticide Act

APPLICANT

E. I. DU PONT DE NEMOURS AND CO.
6054 DU PONT BUILDING
WILMINGTON, DELAWARE

PRODUCT	3. DATE OF REFERRAL
[redacted] SYBAR WEED KILLER [redacted] 352-337	March 17, 1967

COMMENTS BY COORDINATING AGENCY

Place the statement "Keep out of reach of children" in prominent place on the front panel

OFFICE OF PESTICIDES
019501
Bure[illegible] Services
U.S. Public Health Services

MAR 2 4 1967
Thomas W Hein
CHIEF, REGISTRATION STAFF
PESTICIDE PROGRAM, USPHS

[illegible]BY (Name)	6. DATE	7. NAME OF AGENCY

20

FORM 8-230
DEC 1964

[illegible]CES PR FORM 8-230, OCT 1964, WHICH IS OBS[illegible]TE

U. S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
PESTICIDES REGULATION DIVISION
WASHINGTON, D. C. 20250

INTERDEPARTMENTAL COORDINATION OF ACTIVITIES RELATING TO PESTICIDES

Referral of Application for Registration under the Federal Insecticide, Fungicide, and Rodenticide Act

APPLICANT

E.I. DU PONT DE NEMOURS & COMPANY, INC.
6th Du Pont Building
Wilmington, Delaware

PRODUCT		3. DATE OF REFERRAL
[redacted]	352-317	September 16, 1966

COMMENTS BY COORDINATING AGENCY

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OFFICE OF PESTICIDES
019501
Bureau of State Services (EH)
U.S. Public Health Service

SEP 2 3 1966
Thomas N Hanis
CHIEF, REGISTRATION STAFF
PESTICIDE PROGRAM, USPHS

21

BY (Name)	6. DATE	7. NAME OF AGENCY
[redacted]		

FORM 9-230
DEC 1964

REPLACES PR FORM 9-230, OCT 1964, WHICH IS OBSOLETE

000703
352-317

Inert ingredient information may be entitled to confidential treatment

CONFIDENTIAL

Composition

of

DU PONT KUBAR Terbacil Weed Killer

terbacil*, technical (95%) 85 %

[redacted]

3-tert-butyl-5-chloro-6-methyluracil

8/9/66

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DU PONT
REG. U. S. PAT. OFF.

SINBAR
TRADEMARK

TERBACIL WEED KILLER

WETTABLE POWDER

ACTIVE INGREDIENT:
Terbacil [3-tert-butyl-5-chloro-6-methyluracil] 80%
INERT INGREDIENTS 20%

U.S. Pat. 3,235,357
USDA Reg. No. 352-317

DIRECTIONS

Du Pont "Sinbar" Terbacil Weed Killer should be used only in accordance with recommendations on this label, or in separate published Du Pont recommendations available through local dealers.

"Sinbar" is a wettable powder to be mixed in water and applied as a spray for the control of seedling weeds in sugar cane grown in Louisiana for seed purposes only. It selectively controls seedling Johnsongrass and annual weeds such as crabgrass, barnyardgrass, pigweed, chickweed, henbit, and wild geranium. Treatment will not control established perennial weeds such as Johnsongrass from rhizomes; follow recommended summer fallow practices for rhizome Johnsongrass control.

Effects are slow to appear and may not become apparent until the chemical has been carried into the root zone of the weeds by moisture. The degree of control and duration of effect will vary with the amount of chemical applied, soil type, rainfall, and other conditions. "Sinbar" is non-corrosive, non-volatile, and non-flammable.

LOUISIANA SUGAR CANE
(GROWN FOR SEED PURPOSES ONLY)

Apply either as a split application (fall plus spring) or as a single application in the spring. For best results in controlling Johnsongrass seedlings, the split application schedule is preferred.

Apply as a band treatment over the sugar cane row covering ⅓ to ½ of the total area. Use sufficient water (15 to 25 gals. per crop acre) to provide thorough and uniform coverage of the soil surface.

Split Application (Fall plus Spring)—Use ¾ lb. (⅓ of area) to 1 lb. (½ of area) per crop acre for each application. In calculating amount to apply for various band widths within the recommended range, the

CAUTION! MAY IRRITATE EYES, NOSE, THROAT, AND SKIN.
Avoid breathing dust or spray mist.
Avoid contact with skin, eyes, and clothing.
Keep from children.

IMPORTANT: Use "Sinbar" only as specifically recommended. Overdosage, caused by inaccurate preparation of spray mixture, improper calibration of equipment or application at a speed slower than used for calibration, should be avoided as injury to the crop may result. Do NOT apply, drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. Do NOT use on lawns, walks, driveways, tennis courts, or similar areas. Prevent drift of dry powder or spray to desirable plants. Do NOT contaminate domestic waters. Keep from contact with fertilizers, insecticides, fungicides, and seeds.

Thoroughly clean all traces of "Sinbar" from application equipment immediately after use; otherwise, injury to desirable vegetation may result when equipment is used again. Flush tank, pump, hoses, and boom with several changes of water after removing nozzle tips and screens (clean these parts separately).

NET 10 LBS.

QC-19518 8-66 Made in U.S.A. Printed in U.S.A.

CONTINUED FROM LEFT PANEL

Apply in the fall immediately after planting, covering, and rolling, and before weeds or cane emerge. Repeat application in the early spring immediately after off-barring and after soil has been thrown back, and prior to weed emergence.

Single Application (Spring Treatment)—For fall-planted cane or first year stubble cane not treated in the fall with "Sinbar", use 1⅛ lbs. (⅓ of area) to 2 lbs. (½ of area) per crop acre. In calculating amount to apply for various band widths within the recommended range, the rate is 4 lbs. per acre on a broadcast basis.

Apply in the early spring immediately after off-barring and after soil has been thrown back, and prior to spring weed emergence. Beds should be free of weeds that have become established during the previous winter.

Equipment—Use a fixed-boom power sprayer properly calibrated to a constant speed and rate of delivery. Make certain spray equipment is clean (free of scale, rust, dirt, oil, and pesticide deposits). To prevent nozzle plugging, strainer and nozzle screens should be 50 mesh or coarser. Spray booms must be shut off while starting, turning, slowing or stopping, as overdosage may result in injury to the crop. Continuous agitation in the spray tank is required to keep the material in suspension. Mechanical agitation is preferred, although hydraulic agitation is satisfactory if pump has sufficient capacity to return at least 5 percent of the tank capacity per minute when the sprayer is in operation. Do not use air agitation.

Note: Do not use treated crop for food or feed purposes. Do not replant treated areas to any crop within one year of last application as injury to subsequent crops may result.

NOTICE TO BUYER

SELLER makes no warranty of any kind, express or implied, concerning the use of this product. BUYER assumes all risk of use

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352-317

DIRECTIONS

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LOUISIANA SUGAR CANE

([redacted])

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Apply as a band treatment over the sugar cane row covering ⅓ to ½ of the total area. Use sufficient water (15 to 25 gals. per crop acre) to provide thorough and uniform coverage of the soil surface.

Split Application (Fall plus Spring)—Use ⅔ lb. (⅓ of area) to 1 lb. (½ of area) per crop acre for each application. In calculating amount to apply for various band widths within the recommended range, the rate is 2 lbs. per acre on a broadcast basis.

DU PONT

REG. U. S. PAT. OFF.

SINBAR

TRADEMARK

WEED KILLER

WETTABLE POWDER

ACTIVE INGREDIENT:	
3-tert-butyl-5-chloro-6-methyluracil	80%
INERT INGREDIENTS	20%

U.S. Pat. Pending

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NET 10 LBS.

GC 19518 8-65

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E. I. DU PONT DE NEMOURS & COMPANY (INC.)

CONTINUED FROM LEFT PANEL

Apply in the fall immediately after planting, covering, and rolling, and before weeds or cane emerge. Repeat application in the early spring immediately after off-barring and after soil has been thrown back, and prior to weed emergence.

Single Application (Spring Treatment)—For fall-planted cane or first year stubble cane not treated in the fall with "Sinbar", use 1⅓ lbs. (⅓ of area) to 2 lbs. (½ of area) per crop acre. In calculating amount to apply for various band widths within the recommended range, the rate is 4 lbs. per acre on a broadcast basis.

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Note: [redacted]. Do not replant treated areas to any crop within one year of last application as injury to subsequent crops may result.

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