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2548-69

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ACCEPTED

NOV 13 1987

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 2548-69

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DETIA ROTOX AT LABEL --- FRONT PANEL

RESTRICTED USE PESTICIDE
DUE TO ACUTE INHALATION TOXICITY OF HIGHLY
TOXIC HYDROGEN PHOSPHIDE (PHOSPHINE, PH₃) GAS

For retail sale to and use only by certified applicators for those uses covered by the applicator's certification or persons trained in accordance with the accompanying product manual working under the direct supervision and in the physical presence of the certified applicator. Physical presence means on site or on the premises. Read and follow the label and the Research Products Company product manual which contains complete instructions for the safe use of this pesticide.

Detia(R) ROTOX(R) AT

Active Ingredient: Aluminum Phosphide.....57%
Inert Ingredients:.....43%
TOTAL.....100%

KEEP OUT OF REACH OF CHILDREN

DANGER/PELIGRO-POISON

PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta se le haya sido explicado ampliamente.

STATEMENT OF PRACTICAL TREATMENT

Symptoms of overexposure to hydrogen phosphide are headache, dizziness, nausea, difficult breathing, vomiting and diarrhea. In all cases of overexposure get medical attention immediately. Take victim to the doctor or emergency treatment facility.

IF GAS OR DUST FROM TABLETS IS INHALED: Get exposed person to fresh air. Keep warm and make sure person can breathe freely. If breathing has stopped, give artificial respiration by mouth-to-mouth or other means of resuscitation. Do not give anything by mouth to an unconscious person.

IF THE TABLETS OR THEIR DUST ARE SWALLOWED: Drink or administer

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02300 one or two glasses of water and induce vomiting by touching back
 02350 of throat with finger, or if available, administer syrup of
 02400 ipecac. Do not give anything by mouth if victim is unconscious
 02450 or not alert.

02500 IF TABLETS OR THEIR DUST GET ON SKIN OR CLOTHING: Brush or
 02550 shake material off clothes and shoes in well ventilated area.
 02600 Allow clothes to aerate in a ventilated area prior to
 02650 laundering. Do not leave contaminated clothing in occupied
 02700 and/or confined areas such as automobiles, vans, motel rooms,
 02750 homes, etc. Wash contaminated skin thoroughly with soap and
 02800 water.

02850 IF DUST FROM THE TABLETS GETS IN EYES: Flush with plenty of
 02900 water. Get medical attention.

02950 See side panels for additional precautionary statements.

03000 Manufactured by: Detia Freyberg, GmbH
 03050 P. O. Box 10
 03100 6947 Laudendach
 03150 F.R. of Germany

03200 Distributed by: Research Products Company
 03250 Div. of McShares, Inc.
 03300 P. O. Box 1460
 03350 Salina, KS 67402-1460

03400 EPA Establishment No. 33982RG01 Net Contents:
 03450 EPA Registration No. 2548-69 Net Contents:

04100 LEFT PANEL

04150 HAZARDS TO HUMANS AND DOMESTIC ANIMALS

04200 KEEP OUT OF REACH OF CHILDREN
 04250 DANGER/POISON

04300 Aluminum phosphide in tablets or their dust can be fatal if
 04350 swallowed. Do not get in eyes, in nose, on skin or on clothing.
 04400 Do not eat, drink or smoke while handling aluminum phosphide
 04450 fumigants. When the container is opened Detia(R) ROTOX(R) AT
 04500 will begin to release hydrogen phosphide (phosphine) which is an
 04550 extremely toxic gas. Contact with water, acids and some other
 04600 liquids will accelerate this reaction. Pure hydrogen phosphide
 04650 gas is odorless; the odor is due to a contaminant. Since an
 04700 odor may not be detected under certain circumstances, the
 04750 absence of a garlic odor does not mean that hydrogen phosphide
 04800 gas is absent. Observe proper application and disposal.

05100 procedures specified elsewhere in the labeling to prevent
05150 overexposure.

05200
05250 FREQUENT EXPOSURE TO LOW CONCENTRATIONS ABOVE PERMISSIBLE LEVELS
05300 OVER A PERIOD OF DAYS OR WEEKS MAY CAUSE POISONING.

05350
05400 NOTE TO PHYSICIAN

05450
05500 Aluminum phosphide in tablets or their dust reacts with moisture
05550 from the air, water, acids, and many other liquids to release
05600 hydrogen phosphide (phosphine) gas. Mild exposure by inhalation
05650 causes malaise (indefinite feeling of sickness), ringing of
05700 ears, fatigue, nausea and pressure in chest which are relieved
05750 by removal to fresh air. Moderate poisoning causes weakness,
05800 vomiting, epigastric pain (pain just above the stomach), chest
05850 pain, diarrhea and dyspnea (difficulty in breathing). Symptoms
05900 of severe poisoning may occur within a few hours or up to
05950 several days, resulting in pulmonary edema (fluid in lungs) and
06000 may lead to dizziness, cyanosis (blue or purple skin color),
06050 unconsciousness and death.

06100
06150 In sufficient quantity, hydrogen phosphide affects the liver,
06200 kidneys, lungs, nervous system and circulatory system.
06250 Inhalation can cause lung edema (fluid in lungs) and hyperemia
06300 (excess of blood in a body part), small perivascular brain
06350 hemorrhages and brain edema (fluid in brain). Ingestion can
06400 cause lung and brain symptoms, but damage to the viscera (body
06450 cavity organs) is more common. Hydrogen phosphide poisoning may
06500 result in (1) pulmonary edema, (2) liver elevated serum GOT, LDH
06550 and alkaline phosphatase, reduced prothrombin, hemorrhage and
06600 jaundice (yellow skin color) and (3) kidney hematuria (blood in
06650 urine) and anuria (abnormal or lack of urination). Pathology is
06700 characteristic of hypoxia (oxygen deficiency in body tissue).
06750 Treatment is symptomatic.

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RIGHT PANEL

DIRECTIONS FOR USE

07000
07050 It is a violation of federal law to use this product in a
07100 manner inconsistent with its labeling.

07150
07200 The "Delia(R) FOTOX(R) AT and Delia(R) RUTOX(R) AP Instruction
07250 Booklet" is a part of labeling. Refer to it for application
07300 procedures and other information necessary to properly use
07400 Delia(P) FOTOX(R).
07450

07500
07550
07600 THIS PRODUCT IS ACCOMPANIED BY THE LABELING LISTED ABOVE. READ
07650 AND UNDERSTAND THE ENTIRE LABELING. ALL PARTS OF THE LABELING
07700 ARE EQUALLY IMPORTANT FOR SAFE AND EFFECTIVE USE OF THIS
07750

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07000 PRODUCT. CALL RESEARCH PRODUCTS COMPANY OR EPA IF YOU HAVE ANY
07050 QUESTIONS OR DO NOT UNDERSTAND ANY PART OF THIS LABELING.

07200 Refer to product labeling for use restrictions to protect
07250 ENDANGERED SPECIES.

08050
08100
08150 STORAGE AND DISPOSAL

08200 STORAGE

08300
08350 Flasks should be stored in a dry, well ventilated area, away
08400 from heat and under lock and key. Post as a pesticide storage
08450 area. Do not contaminate water, food or feed by storing
08500 pesticides in the same areas used to store these commodities.

08550
08600 Do not store in buildings where humans or domestic animals
08650 reside. Refer to the "Detia(R) ROTOX(R) AT and Detia(R)
08700 ROTOX(R) AP Instruction Booklet" for additional storage
08750 instructions.

08800
08850 DISPOSAL OF UNREACTED OR PARTIALLY REACTED TABLETS (From spills,
08900 leaking flasks or other sources)

08950
09000 Unreacted or partially reacted Detia(R) ROTOX(R) tablets are
09050 acutely hazardous. Improper disposal of this product is a
09100 violation of federal law.

09150
09200 If this product cannot be disposed of by ordinary use or
09250 according to labeling instructions, contact your state pesticide
09300 or environmental control agency or the hazardous waste
09350 representative at the nearest EPA regional office for guidance.
09400 Do not contaminate water by disposal.

09450
09500 Reacted tablets are not hazardous. For complete disposal, spill
09550 and leak procedures refer to the booklet "Detia(R) ROTOX(R) AT
09600 and Detia(R) ROTOX(R) AP Instruction Booklet."

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09750 DISPOSAL OF EMPTY FLASKS

09800
09850 METHOD ONE: Triple rinse flasks and lids with water. Then
09900 offer for recycling or reconditioning, or puncture and dispose
09950 of them in a sanitary landfill or other approved site or by
10000 other procedures approved by state and local authorities.
10050 Dispose of rinsate in a sanitary landfill or by other approved
10100 procedures.

10150
10200 METHOD TWO: Remove lids and place empty flasks outdoors or in
10250 structure being fumigated until residue in flasks is reacted.
10300 Puncture and dispose of them in a sanitary landfill or other
10350 approved site or by other procedures approved by state and local
10400 authorities.

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10500
10550 GENERAL
10600
10650 Consult federal, state and local disposal authorities for
10700 approved procedures other than those given above. Approved
10750 procedures vary for different types of generators.
10800
10850 *If in doubt concerning whether the dust is reacted and/or
10900 concerning proper disposal techniques contact Research Products
10950 Company.

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Fungicide, and Rodenticide Act,
as amended, for the pesticide
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EPA Reg. No. 2548-69

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DETIA ROTOX AI (small label) --- FRONT PANEL

RESTRICTED USE PESTICIDE
DUE TO ACUTE INHALATION TOXICITY OF HIGHLY
TOXIC HYDROGEN PHOSPHIDE (PHOSPHINE, PH₃) GAS

For retail sale to and use only by certified applicators for those uses covered by the applicator's certification or persons trained in accordance with the accompanying product manual working under the direct supervision and in the physical presence of the certified applicator. Physical presence means on site or on the premises. Read and follow the label and the Research Products Company product manual which contains complete instructions for the safe use of this pesticide.

Detia(R) ROTOX(R) AI

Active Ingredient: Aluminum Phosphide.....57%
 Inert Ingredients:.....43%
 TOTAL.....100%

KEEP OUT OF REACH OF CHILDREN

DANGER/PELIGRO-POISON

PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta se le haya sido explicado ampliamente.

STATEMENT OF PRACTICAL TREATMENT

Symptoms of overexposure to hydrogen phosphide are headache, dizziness, nausea, difficult breathing, vomiting and diarrhea. In all cases of overexposure get medical attention immediately. Take victim to the doctor or emergency treatment facility.

IF GAS OR DUST FROM TABLETS IS INHALED: Get exposed person to fresh air. Keep warm and make sure person can breathe freely. If breathing has stopped, give artificial respiration by mouth-to-mouth or other means of resuscitation. Do not give anything by mouth to an unconscious person.

IF THE TABLETS OR THEIR DUST ARE SWALLOWED: Drink or administer

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02450 one or two glasses of water and induce vomiting by touching back
02500 of throat with finger, or if available, administer syrup of
02550 ipecac. Do not give anything by mouth if victim is unconscious
02600 or not alert.

02650 IF TABLETS OR THEIR DUST GET ON SKIN OR CLOTHING: Brush or
02700 shake material off clothes and shoes in well ventilated area.
02750 Allow clothes to aerate in a ventilated area prior to
02800 laundering. Do not leave contaminated clothing in occupied
02850 and/or confined areas such as automobiles, vans, motel rooms,
02900 homes, etc. Wash contaminated skin thoroughly with soap and
02950 water.

03000 IF DUST FROM THE TABLETS GETS IN EYES: Flush with plenty of
03050 water. Get medical attention.

03100 See side panels for additional precautionary statements.

03150 Manufactured by: Delia Freyberg, GMBH
03200 P. O. Box 10
03250 6947 Laudenbach
03300 F.R. of Germany

03350 Distributed by: Research Products Company
03400 Div. of McShaves, Inc.
03450 P. O. Box 1460
03500 Salina, KS 67402-1460

03550 EPA Establishment No. 33982WG01 Net Contents:
03600 EPA Registration No. 2548-69 Net Contents:

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04200 LEFT PANEL

04250 HAZARDS TO HUMANS AND DOMESTIC ANIMALS

04300 KEEP OUT OF REACH OF CHILDREN
04350 DANGER/POISON

04400 Aluminum phosphide in tablets or their dust can be fatal if
04450 swallowed. Do not get in eyes, in nose, on skin or on clothing.
04500 Do not eat, drink or smoke while handling aluminum phosphide
04550 fucigants. When the container is opened Delia(R) ROTOX(R) AT
04600 will begin to release hydrogen phosphide (phosphine) which is an
04650 extremely toxic gas. Contact with water, acids and some other
04700 liquids will accelerate this reaction. Pure hydrogen phosphide
04750 gas is odorless; the odor is due to a contaminant. Since an
04800 odor may not be detected under certain circumstances, the
04850 absence of a garlic odor does not mean that hydrogen phosphide
04900 gas is absent. Observe proper application and disposal
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01100 procedures specified elsewhere in the labeling to prevent
 01150 overexposure.

01200 FREQUENT EXPOSURE TO LOW CONCENTRATIONS ABOVE PERMISSIBLE LEVELS
 01250 OVER A PERIOD OF DAYS OR WEEKS MAY CAUSE POISONING.

01300 NOTE TO PHYSICIAN

01400 Refer to "Detia(R) ROTOX(R) AT and Detia(R) ROTOX(R) AP
 01450 Instruction Booklet" for this section.

01500 RIGHT PANEL .

01600 DIRECTIONS FOR USE

01700 It is a violation of federal law to use this product in a
 01750 manner inconsistent with its labeling.

01800 The "Detia(R) ROTOX(R) AT and Detia(R) ROTOX(R) AP Instruction
 01850 Booklet" is a part of labeling. Refer to it for application
 01900 procedures and other information necessary to properly use
 01950 Detia(R) ROTOX(R).

02000 THIS PRODUCT IS ACCOMPANIED BY THE LABELING LISTED ABOVE. READ
 02050 AND UNDERSTAND THE ENTIRE LABELING. ALL PARTS OF THE LABELING
 02100 ARE EQUALLY IMPORTANT FOR SAFE AND EFFECTIVE USE OF THIS
 02150 PRODUCT. CALL RESEARCH PRODUCTS COMPANY OR EPA IF YOU HAVE ANY
 02200 QUESTIONS OR DO NOT UNDERSTAND ANY PART OF THIS LABELING.

02300 Refer to product labeling for use restrictions to protect
 02350 ENDANGERED SPECIES.

02400 STORAGE AND DISPOSAL

02500 Refer to "Detia(R) ROTOX(R) AT and Detia(R) ROTOX(R) AP
 02550 Instruction Booklet" for this section.

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ACCEPTED
NOV 13 1987
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 2548-69-70

RESTRICTED USE
PESTICIDE

DUE TO ACUTE INHALATION TOXICITY OF HIGHLY
TOXIC HYDROGEN PHOSPHIDE (PHOSPHINE, PH₃) GAS

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For retail sale to and use only by certified applicators for those uses covered by the applicator's certification or persons trained in accordance with this product manual working under the direct supervision and in the physical presence of the certified applicator. Physical presence means on site or on the premises. Read and follow the label and the Research Products Company product manual which contains complete instructions for the safe use of this pesticide.

Detia(R) ROTOX(R) AT
and
Detia(R) ROTOX(R) AP

INSTRUCTION BOOKLET

EPA Registration No. 2548-69
EPA Registration No. 2548-70
EPA Establishment No. 33982WG01

Research Products Company
Div. of McShares, Inc.
P. O. Box 1460
Salina, KS 67402-1460

RECEIVED
EPA

NOV 1987

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I. INTRODUCTION

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A. HISTORY

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The history of Detia(R) pesticides is long, dating back to the mid-1930's. In 1970 Detia(R) GAS EX-B was introduced into the United States. The manufacturer, Detia Freyberg GMBH, West Germany was the early pioneer in the development of hydrogen phosphide as a fumigant gas.

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B. PRODUCT DESCRIPTION

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Both Detia(R) ROTOX(R) AP and Detia(R) ROTOX(R) AT are a mixture of aluminum phosphide (57% by weight), ammonium carbamate and urea which is pressed into tablet and/or pellet form. The nearly spherical pellets are about 3/8" in diameter and weigh 0.6 grams each. The tablets are either disc shaped (4/5" in diameter and 1/5" thick) or spherical in shape (5/8" in diameter) and weigh 3.0 grams each. A pellet will produce about 0.2 gram hydrogen phosphide, the tablet about 1.0 gram. Both react with atmospheric moisture to produce hydrogen phosphide (PH3) in the following way:

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Warm, humid air accelerates the reaction while cool, dry air has the opposite effect.

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Detia(R) ROTOX(R) also contains ammonium carbamate which liberates ammonia and carbon dioxide as follows:

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These gases are essentially nonflammable and act as inerting agents to reduce fire hazards. The ammonia gas also serves as a warning agent.

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C. PRODUCT PACKAGING

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The tablets are packaged 500 and 100 to a flask. The pellets are packaged 1660 and 500 to a flask.

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The aluminum flasks in which they are packaged are resealable and seamless. Their shelf life is almost unlimited as long as the packaging remains well sealed and intact. Once opened, the flasks may be tightly resealed and stored for future use.

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D. WHAT IS HYDROGEN PHOSPHIDE?

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Hydrogen phosphide, more commonly referred to as phosphine, is a colorless gas which is toxic to rodents, humans, and other forms of animal life. It is very mobile with a high vapor pressure. Thus, the penetrating capability of hydrogen phosphide is great. The combination of high molecular activity, vapor pressure and toxicity at low dosages accounts for its wide acceptance as a fumigant.

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E. SAFETY RECOMMENDATIONS

1. Carefully read the labeling and follow instructions explicitly.
2. Never allow uninstructed persons to handle Detia(R).
3. Wear dry gloves made of cotton or other material when contact with tablets, pellets or their dust is likely.
4. Open fumigant containers in open air. Never open in a flammable atmosphere.
5. Do not allow Detia(R) to contact liquid water or to pile up.
6. Dispose of empty containers in a proper manner consistent with the label instructions.
7. Aerate contaminated clothing in well ventilated area prior to washing.
8. Keep containers tightly closed except when removing product.
9. Do not reuse aluminum phosphide containers for any purpose other than recycling or reconditioning.
10. OSHA recommends that the exposure screening of employees be conducted to detect impaired pulmonary function. OSHA recommends that any employees developing the above condition be referred for medical attention.

II. PRECAUTIONARY STATEMENTS

A. HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Keep Out of Reach of Children
 DANGER-POISON

Aluminum phosphide in pellets, tablets or their dust can be fatal if swallowed. Do not get in eyes, in nose, on skin or on clothing. Do not eat, drink or smoke while handling aluminum phosphide fumigants. When the container is opened, Detia(R) ROTOX(R) will begin to release hydrogen phosphide (phosphine) which is an extremely toxic gas. Contact with water, acids and some other liquids will accelerate this reaction. Pure hydrogen phosphide gas is odorless; the odor is due to a contaminant. Since an odor may not be detected under certain circumstances, the absence of a garlic odor does not mean that hydrogen phosphide gas is absent. Observe proper application and disposal procedures specified elsewhere in the labeling to prevent overexposure.

FREQUENT EXPOSURE TO CONCENTRATIONS ABOVE PERMISSIBLE LEVELS OVER A PERIOD OF DAYS OR WEEKS MAY CAUSE POISONING.

B. STATEMENT OF PRACTICAL TREATMENT

Symptoms of overexposure to hydrogen phosphide are headache, dizziness, nausea, difficult breathing, vomiting and diarrhea. In all cases of overexposure get medical

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08650 attention immediately. Take victim to a doctor or emergency
08700 treatment facility.

08750

08800 U 1. If gas or dust from tablets or pellets is inhaled: Get
08900 exposed person to fresh air. Keep warm and make sure
08950 person can breathe freely. If breathing has stopped,
09000 give artificial respiration by mouth-to-mouth or other
09050 means of resuscitation. Do not give anything by mouth
09100 to an unconscious person.

09150

09200 U 2. If the pellets, tablets or their dust are swallowed:
09300 Drink or administer one or two glasses of water and induce
09350 vomiting by touching back of throat with finger, or if
09400 available, administer syrup of ipecac. Do not give
09450 anything by mouth if victim is unconscious or not alert.

09500

09600 U 3. If pellets, tablets or their dust gets on skin or
(9700 U clothing: Brush or shake material off clothes and shoes in
) 9750 well ventilated area. Allow clothes to aerate in a ventilated
09800 area prior to laundering. Do not leave contaminated
09850 clothing in occupied and/or confined area such as
09900 automobiles, vans, motel rooms, homes, etc. Wash
09950 contaminated skin thoroughly with soap and water.

10000

10000 U 4. If dust from the pellets or tablets gets in eyes:
10150 Flush with plenty of water. Get medical attention.

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C. NOTE TO PHYSICIAN

10300 Aluminum phosphide tablets, pellets or their dust reacts
10350 with moisture from the air, water, acids and many other
10400 liquids to release hydrogen phosphide (phosphine) gas. Mild
10450 exposure by inhalation causes malaise (indefinite feeling of
10500 sickness), ringing of ears, fatigue, nausea and pressure in
(10550 chest which are relieved by removal to fresh air. Moderate
) 10600 poisoning causes weakness, vomiting, epigastric pain (pain
10650 just above the stomach), chest pain, diarrhea and dyspnea
10700 (difficulty in breathing). Symptoms of severe poisoning may
10750 occur within a few hours or up to several days, resulting in
10800 pulmonary edema (fluid in lungs) and may lead to dizziness,
10850 cyanosis (blue or purple skin color), unconsciousness and
10900 death.

10950

11000 In sufficient quantity hydrogen phosphide affects the liver,
11050 kidneys, lungs, nervous system, and circulatory system.
11100 Inhalation can cause lung edema (fluid in lungs) and
11150 hyperemia (excess of blood in a body part), small
11200 perivascular brain hemorrhages and brain edema (fluid in
11250 brain). Ingestion can cause lung and brain symptoms, but
11300 damage to the viscera (body cavity organs) is more common.
11350 Hydrogen phosphide poisoning may result in (1) pulmonary
11400 edema, (2) liver elevated serum GOT, LDH and alkaline
11450 phosphatase, reduced prothrombin, hemorrhage and jaundice
11500 (yellow skin color) and (3) kidney hematuria (blood in

05100 procedures specified elsewhere in the labeling to prevent
 05150 overexposure.

05200
 05250 FREQUENT EXPOSURE TO LOW CONCENTRATIONS ABOVE PERMISSIBLE LEVELS
 05300 OVER A PERIOD OF DAYS OR WEEKS MAY CAUSE POISONING.

05350
 05400 NOTE TO PHYSICIAN

05450
 05500 Refer to "Detia(R) ROTOX(R) AT and Detia(R) ROTOX(R) AP
 05550 Instruction Booklet" for this section.

05600
 05650 RIGHT PANEL .

05700
 05750 DIRECTIONS FOR USE

05800
 05850 It is a violation of federal law to use this product in a
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 06450 QUESTIONS OR DO NOT UNDERSTAND ANY PART OF THIS LABELING.

06500
 06550 Refer to product labeling for use restrictions to protect
 06600 ENDANGERED SPECIES.

06650
 06700 STORAGE AND DISPOSAL

06750
 06800 Refer to "Detia(R) ROTOX(R) AT and Detia(R) ROTOX(R) AP
 06850 Instruction Booklet" for this section.

14300 temperature increase and confine the release of gas so that
14350 ignition could occur.

14400
14450 Always open flasks of Detia(R) ROTOX in open air. Never
14500 open in a flammable atmosphere because on rare occasions
14550 they may flash. When opening, point the container away from
14600 the face and body and slowly loosen the cap. These
14650 precautions will also reduce the applicator's exposure to
14700 hydrogen phosphide gas.

14750
14800 Pure hydrogen phosphide gas is practically insoluble in
14850 water and oils and is stable at normal fumigation
14900 temperatures. However, it may react with certain metals and
14950 cause corrosion, especially at higher temperatures and
15000 relative humidities. Metals such as copper, brass and other
15050 copper alloys, and precious metals such as gold and silver
15100 are susceptible to corrosion by hydrogen phosphide.

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III. DIRECTIONS FOR USE

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A. GENERAL

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1. It is a violation of federal law to use this product in a manner inconsistent with its labeling. Detia(R) ROTOX(R) AT and AP are Restricted Use Pesticides due to the acute inhalation toxicity of hydrogen phosphide (phosphine, PH₃) gas. These products are for retail sale to and use only by certified applicators for those uses covered by the applicator's certification or persons trained in accordance with this product manual working under the direct supervision and in the physical presence of the certified applicator. Physical presence means on site or on the premises.

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2. Detia(R) is a highly hazardous material and may be used only by individuals trained in its proper use. Before using, read and follow the label precautions and directions on the label and in labeling.

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Additional copies of this manual are available from:

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3. Do not fumigate with this product when burrow temperature is below 40 degrees F (5 degrees C).

B. PROTECTIVE CLOTHING

Wear dry gloves made of cotton or other material when

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I. ENDANGERED SPECIES RESTRICTIONS

The use of Deltia(R) ROTOX(R) in a manner that may kill or otherwise harm an endangered or threatened species or adversely modify their habitat is a violation of federal laws. Before using this pesticide on range and/or pastureland in the counties listed below, you must obtain the PESTICIDE USE BULLETIN FOR PROTECTION OF ENDANGERED SPECIES for the county in which the product is to be used. The bulletin is available from your county extension agent, state fish and game office, or your pesticide dealer. Use of this product in a manner inconsistent with the PESTICIDE USE BULLETIN FOR PROTECTION OF ENDANGERED SPECIES is a violation of federal laws.

Even if applicable county bulletins do not prohibit the use of this product at the intended site of application, you may not use this product for control of prairie dogs in the states of Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah or Wyoming unless a pre-control survey has been conducted. Contact the nearest U.S. Fish and Wildlife Service endangered species specialist to determine survey requirements in your area. This survey must be in compliance with the black-footed ferret survey guidelines, developed by the U.S. Fish and Wildlife Service, and a determination must be made in accordance with the guidelines that black-footed ferrets are not present in the treatment area.

CALIFORNIA

Fresno, Inyo, Kern, Kings, Madera, Merced, Monterey, San Benito, San Luis Obispo, Santa Barbara, Stanislaus and Tulare

FLORIDA

Statewide

GEORGIA

Appling, Atkinson, Bacon, Baker, Ben Hill, Bleckley, Berrien, Brantley, Brooks, Bryan, Bullock, Calhoun, Camden, Candler, Charlton, Chatham, Clinch, Coffee, Colquitt, Cook, Crisp, Decatur, Dodge, Dooly, Daugherty, Early, Echols, Effingham, Emanuel, Evans, Glynn, Grady, Irwin, Jeff Davis, Jenkins, Johnson, Lanier, Laurens, Lee, Liberty, Long, Lowndes, Macon, McCintosh, Miller, Mitchell, Montgomery, Pierce, Pulaski, Screven, Seminole, Telfair, Tattnall, Thomas, Tift, Toombs, Treutlen, Turner, Ware, Wayne, Wheeler, Wilcox and Worth

NEW MEXICO

Hidalgo

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E. SAFETY RECOMMENDATIONS

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1. Carefully read the labeling and follow instructions explicitly.

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06150

2. Never allow uninstructed persons to handle Detia(R).

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3. Wear dry gloves made of cotton or other material when contact with tablets, pellets or their dust is likely.

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4. Open fumigant containers in open air. Never open in a flammable atmosphere.

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5. Do not allow Detia(R) to contact liquid water or to pile up.

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6. Dispose of empty containers in a proper manner consistent with the label instructions.

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7. Aerate contaminated clothing in well ventilated area prior to washing.

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8. Keep containers tightly closed except when removing product.

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9. Do not reuse aluminum phosphide containers for any purpose other than recycling or reconditioning.

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10. OSHA recommends that the exposure screening of employees be conducted to detect impaired pulmonary function. OSHA recommends that any employees developing the above condition be referred for medical attention.

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II. PRECAUTIONARY STATEMENTS

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A. HAZARDS TO HUMANS AND DOMESTIC ANIMALS

07400

Keep Out of Reach of Children

07450

DANGER-POISON

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Aluminum phosphide in pellets, tablets or their dust can be fatal if swallowed. Do not get in eyes, in nose, on skin or on clothing. Do not eat, drink or smoke while handling aluminum phosphide fumigants. When the container is opened, Detia(R) ROTOX(R) will begin to release hydrogen phosphide (phosphine) which is an extremely toxic gas. Contact with water, acids and some other liquids will accelerate this reaction. Pure hydrogen phosphide gas is odorless; the odor is due to a contaminant. Since an odor may not be detected under certain circumstances, the absence of a garlic odor does not mean that hydrogen phosphide gas is absent. Observe proper application and disposal procedures specified elsewhere in the labeling to prevent overexposure.

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FREQUENT EXPOSURE TO CONCENTRATIONS ABOVE PERMISSIBLE LEVELS OVER A PERIOD OF DAYS OR WEEKS MAY CAUSE POISONING.

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B. STATEMENT OF PRACTICAL TREATMENT

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Symptoms of overexposure to hydrogen phosphide are headache, dizziness, nausea, difficult breathing, vomiting and diarrhea. In all cases of overexposure get medical

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08650 attention immediately. Take victim to a doctor or emergency
 08700 treatment facility.
 08750

08800 U 1. If gas or dust from tablets or pellets is inhaled: Get
 08900 exposed person to fresh air. Keep warm and make sure
 08950 person can breathe freely. If breathing has stopped,
 09000 give artificial respiration by mouth-to-mouth or other
 09050 means of resuscitation. Do not give anything by mouth
 09100 to an unconscious person.
 09150

09200 U 2. If the pellets, tablets or their dust are swallowed:
 09300 Drink or administer one or two glasses of water and induce
 09350 vomiting by touching back of throat with finger, or if
 09400 available, administer syrup of ipecac. Do not give
 09450 anything by mouth if victim is unconscious or not alert.
 09500

09600 U 3. If pellets, tablets or their dust gets on skin or
 (9800 U clothing: Brush or shake material off clothes and shoes in
 09750 well ventilated area. Allow clothes to aerate in a ventilated
 09800 area prior to laundering. Do not leave contaminated
 09850 clothing in occupied and/or confined area such as
 09900 automobiles, vans, motel rooms, homes, etc. Wash
 09950 contaminated skin thoroughly with soap and water.
 10000

10000 U 4. If dust from the pellets or tablets gets in eyes:
 10150 Flush with plenty of water. Get medical attention.
 10200

10250 C. NOTE TO PHYSICIAN
 10300 Aluminum phosphide tablets, pellets or their dust reacts
 10350 with moisture from the air, water, acids and many other
 10400 liquids to release hydrogen phosphide (phosphine) gas. Mild
 10450 exposure by inhalation causes malaise (indefinite feeling of
 10500 sickness), ringing of ears, fatigue, nausea and pressure in
 (10550 chest which are relieved by removal to fresh air. Moderate
 10600 poisoning causes weakness, vomiting, epigastric pain (pain
 10650 just above the stomach), chest pain, diarrhea and dyspnea
 10700 (difficulty in breathing). Symptoms of severe poisoning may
 10750 occur within a few hours or up to several days, resulting in
 10800 pulmonary edema (fluid in lungs) and may lead to dizziness,
 10850 cyanosis (blue or purple skin color), unconsciousness and
 10900 death.
 10950

11000 In sufficient quantity hydrogen phosphide affects the liver,
 11050 kidneys, lungs, nervous system, and circulatory system.
 11100 Inhalation can cause lung edema (fluid in lungs) and
 11150 hyperemia (excess of blood in a body part), small
 11200 perivascular brain hemorrhages and brain edema (fluid in
 11250 brain). Ingestion can cause lung and brain symptoms, but
 11300 damage to the viscera (body cavity organs) is more common.
 11350 Hydrogen phosphide poisoning may result in (1) pulmonary
 11400 edema, (2) liver elevated serum GOT, LDH and alkaline
 11450 phosphatase, reduced prothrombin, hemorrhage and jaundice
 11500 (yellow skin color) and (3) kidney hematuria (blood in

11600 urine) and anuria (abnormal or lack of urination).
 11650 Pathology is characteristic of hypoxia (oxygen deficiency in
 11700 body tissue). Frequent exposure over a period of days or
 11750 weeks may cause poisoning. Treatment is symptomatic.

11800
 11850 The following measures are suggested for use by the
 11900 physician in accordance with his own judgment:
 11950

- 12000 1. In its milder to moderate forms (symptoms of
 12050 poisoning may take up to 24 hours to make their
 12100 appearance), the following is suggested:
 12150
- 12200 a. Complete rest 1-2 days during which the patient must
 12250 be kept quiet and warm.
- 12300
 12350 b. If the patient suffers from vomiting or increased
 12400 blood sugar, appropriate solutions should be
 12450 administered. Treatment with oxygen is recommended
 12500 as is the administration of cardiac and circulatory
 12550 stimulants.
- 12600
 12650 2. In cases of severe poisoning (intensive care unit
 12700 recommended):
 12750
- 12800 a. Where pulmonary edema is observed, steroid therapy
 12850 should be considered and close medical supervision
 12900 is recommended. Blood transfusions may be
 12950 necessary.
- 13000
 13050 b. In case of manifest pulmonary edema, venesection
 13100 should be performed under vein pressure control.
 13150 Heart glycosides (I.V.) can be used in case of
 13200 hemoconcentration. Venesection may result in shock.
 13250 In the case of progressive edema of the lungs,
 13300 immediately intubate and remove edema fluid and
 13350 administer oxygen over-pressure respiration, as well
 13400 as any measures required for shock treatment. In
 13450 case of kidney failure, extracorporeal hemodialysis
 13500 is necessary. There is no specific antidote known
 13550 for this poisoning.
- 13600
 13650 c. If pellets or tablets are ingested, induce vomiting.
 13700 Flush the stomach with a diluted potassium
 13750 permanganate solution or a solution of magnesium
 13800 peroxide until flushing liquid ceases to smell of
 13850 car. de. Thereafter, apply carbomedicinalis.

13900
 13950 D. PHYSICAL AND CHEMICAL HAZARDS

14000 Aluminum phosphide in tablets, pellets or partially spent
 14050 dust will release hydrogen phosphide gas if exposed to
 14100 moisture from the air or if it comes into contact with
 14150 water, acids or many other liquids. Piling of tablets,
 14200 pellets or dust from their fragmentation may cause a

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temperature increase and confine the release of gas so that ignition could occur.

Always open flasks of Detia(R) ROTOX in open air. Never open in a flammable atmosphere because on rare occasions they may flash. When opening, point the container away from the face and body and slowly loosen the cap. These precautions will also reduce the applicator's exposure to hydrogen phosphide gas.

Pure hydrogen phosphide gas is practically insoluble in water and oils and is stable at normal fumigation temperatures. However, it may react with certain metals and cause corrosion, especially at higher temperatures and relative humidities. Metals such as copper, brass and other copper alloys, and precious metals such as gold and silver are susceptible to corrosion by hydrogen phosphide.

III. DIRECTIONS FOR USE

A. GENERAL

1. It is a violation of federal law to use this product in a manner inconsistent with its labeling. Detia(R) ROTOX(R) AT and AP are Restricted Use Pesticides due to the acute inhalation toxicity of hydrogen phosphide (phosphine, PH₃) gas. These products are for retail sale to and use only by certified applicators for those uses covered by the applicator's certification or persons trained in accordance with this product manual working under the direct supervision and in the physical presence of the certified applicator. Physical presence means on site or on the premises.

2. Detia(R) is a highly hazardous material and may be used only by individuals trained in its proper use. Before using, read and follow the label precautions and directions on the label and in labeling.

Additional copies of this manual are available from:

Research Products Company
Div. of McShares, Inc.
P. O. Box 1460
Salina, Kansas 67402-1460
913-825-2181

3. Do not fumigate with this product when burrow temperature is below 40 degrees F (5 degrees C).

B. PROTECTIVE CLOTHING

Wear dry gloves made of cotton or other material when

- 17000 contact with tablets, pellets, or their dust is likely.
 17050 Wash hands after use.
 17100
- C. RESPIRATORY PROTECTION
 17150 Respiratory protection need not be available for outdoor
 17200 applications.
 17250
 17300
- D. HYDROGEN PHOSPHIDE EXPOSURE LIMITS
 17350 Exposure to hydrogen phosphide must not exceed the 8
 17400 hour TWA of 0.3 ppm.
 17450
 17500
- E. INDUSTRIAL HYGIENE MONITORING
 17550 Monitoring is not required outdoors.
 17600
 17650
- F. LIST OF BURROWING PESTS
 17700 Dettia(R) ROTOX(R) may be used out of doors only for the
 17750 control of the following burrowing rodents and moles: marmot
 17800 sp. - woodchucks and yellow-belly marmots (rockchucks),
 (7850 prairie dogs (except Utah prairie dog), Norway and roof
 17900 rats, mice, ground squirrels, moles (except in Indiana),
 17950 voles, gophers and chipmunks (except in California).
 18000
 18050
- G. APPLICATION INSTRUCTIONS
 18100 Add from 1 to 4 Dettia(R) ROTOX(R) AT tablets or 5 to 20
 18150 Dettia(R) ROTOX(R) AP pellets to each burrow opening. Seal
 18200 tightly by shoveling soil over the entrance. Place the
 18250 pellets or tablets far enough down the burrow that the soil
 18300 used to plug the burrow doesn't cover the pellets or
 18350 tablets, slowing down their action. Where possible,
 18400 subsurface tunnels or runways should be treated every 5 to
 18450 10 feet with a dose of 2 to 4 tablets or 10 to 20 pellets.
 18500 Use lower rates in smaller burrows, in tight soils, under
 18550 moist soil conditions and higher rates in larger burrows, in
 18600 porous soils and/or when soil moisture is low. In extremely
 (18650 dry or porous soil, it is sometimes not possible to obtain
 18700 satisfactory results. This is particularly true in
 18750 instances where the burrow systems are extensive such as
 18800 moles or gophers. It is always better not to fumigate
 18850 during extended periods of dry weather. Treat reopened
 18900 burrows and fresh runways a second time 1 to 3 days after
 18950 the initial treatment.
 19000
 19050
 19100 Dettia(R) may be used out of doors only, for control of
 19150 burrowing pests. Do not use within 15 feet (5 meters) of
 19200 inhabited structures. Do not apply to burrows which may
 19250 open under or into occupied buildings.
 19300
- H. ENVIRONMENTAL HAZARDS
 19350 This product is highly toxic to wildlife. Non-target
 19400 organisms exposed to hydrogen phosphide gas in burrows will
 19450 be killed. Do not apply directly to water or wetlands
 19500 (swamps, bogs, marshes, and potholes). Do not contaminate
 19550 water by cleaning of equipment or disposal of wastes.
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I. ENDANGERED SPECIES RESTRICTIONS

The use of Deltia(R) ROTOX(R) in a manner that may kill or otherwise harm an endangered or threatened species or adversely modify their habitat is a violation of federal laws. Before using this pesticide on range and/or pastureland in the counties listed below, you must obtain the PESTICIDE USE BULLETIN FOR PROTECTION OF ENDANGERED SPECIES for the county in which the product is to be used. The bulletin is available from your county extension agent, state fish and game office, or your pesticide dealer. Use of this product in a manner inconsistent with the PESTICIDE USE BULLETIN FOR PROTECTION OF ENDANGERED SPECIES is a violation of federal laws.

Even if applicable county bulletins do not prohibit the use of this product at the intended site of application, you may not use this product for control of prairie dogs in the states of Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah or Wyoming unless a pre-control survey has been conducted. Contact the nearest U.S. Fish and Wildlife Service endangered species specialist to determine survey requirements in your area. This survey must be in compliance with the black-footed ferret survey guidelines, developed by the U.S. Fish and Wildlife Service, and a determination must be made in accordance with the guidelines that black-footed ferrets are not present in the treatment area.

CALIFORNIA

Fresno, Inyo, Kern, Kings, Madera, Merced, Monterey, San Benito, San Luis Obispo, Santa Barbara, Stanislaus and Tulare

FLORIDA

Statewide

GEORGIA

Appling, Atkinson, Bacon, Baker, Ben Hill, Bleckley, Berrien, Brantley, Brooks, Bryan, Bullock, Calhoun, Camden, Candler, Charlton, Chatham, Clinch, Coffee, Colquitt, Cook, Crisp, Decatur, Dodge, Dooly, Daugherty, Early, Echols, Effingham, Emanuel, Evans, Glynn, Grady, Irwin, Jeff Davis, Jenkins, Johnson, Lanier, Laurens, Lee, Liberty, Long, Lowndes, Macon, McCintosh, Miller, Mitchell, Montgomery, Pierce, Pulaski, Screven, Seminole, Telfair, Tattnall, Thomas, Tift, Toombs, Treutlen, Turner, Ware, Wayne, Wheeler, Wilcox and Worth

NEW MEXICO

Hidalgo

- 22400 UTAH
 22450 Beaver, Garfield, Iron, Kane, Piute, Sevier, Washington and
 22500 Wayne
 22550
 22600 WYOMING
 22650 Albany
 22700
 22750 J. SPECIAL LOCAL RESTRICTIONS
 22800
 22850 (1) NORTH CAROLINA
 22900 Detia(R) ROTOX(R) may only be used for control of rats
 22950 and mice in the state of North Carolina. Use against
 23000 other pests is not permitted.
 23050
 23100 (2) OKLAHOMA
 23150 A special permit for black-tailed prairie dog control
 23200 by poisoning is required in Oklahoma. Contact the
 250 Oklahoma State Department of Wildlife Conservation to
 23300 obtain this permit.
 23350
 23400 (3) WISCONSIN
 23450 A state permit is required for use of pesticides in
 23500 Wisconsin to control small mammals, except rats or mice.
 23550 Please contact your local Department of Natural
 23600 Resources office for information.
 23650
 23700 (4) INDIANA
 23750 Use of Detia(R) ROTOX(R) for mole control is not legal
 23800 in the state of Indiana.
 23850
 23900 (5) MISSOURI
 23950 A state permit is required for use of pesticides in
 24000 Missouri to control small mammals, except rats and
 1050 mice. Please contact the Missouri Department of
 1100 Conservation office for information.
 24150
 24200 (6) KANSAS
 24250 A special permit for black-tailed prairie dog control
 24300 by poisoning is required in Kansas. Contact the Kansas
 24350 Fish and Game Commission to obtain this permit.
 24400
 24450 (7) CALIFORNIA
 24500 Use of Detia(R) ROTOX for chipmunk control is not legal
 24550 in the state of California.
 24600
 24650
 24700 K. STORAGE AND DISPOSAL
 24750 1. STORAGE
 24800 Flasks should be stored in a dry, well ventilated area,
 24850 away from heat and under lock and key. Post as a
 24900 pesticide storage area. Do not contaminate water, food
 24950 or feed by storing pesticides in the same areas used to
 25000 store these commodities. Do not store in buildings

- 25100 where humans or domestic animals reside. Keep out of
 25150 reach of children.
 25200
 25250 Detia(R) ROTOX(R) is supplied in gas tight resealable,
 25300 aluminum flasks. Do not expose the product inside
 25350 flasks to atmospheric moisture any longer than is
 25400 necessary. Seal tightly before returning opened flasks
 25450 to storage. The shelf life of Detia(R) is virtually
 25500 unlimited if the containers are tightly sealed.
 25550
 25600 U 2. DISPOSAL OF UNREACTED OR PARTIALLY REACTED TABLETS OR
 25700 PELLETS
 25750 (From spills, leaking flasks or other sources) Unreacted
 25800 or partially reacted Detia(R) FOTOX(R) AP or Detia(R)
 25850 ROTOX(R) AT are acutely hazardous. Improper disposal of
 25900 these products is a violation of federal law. If these
 25950 products cannot be disposed of by ordinary use or
 26000 according to the instructions that follow, contact your
 26050 state pesticide or environmental control agency or the
 26100 hazardous waste representative at the nearest EPA
 26150 regional office for guidance. Do not contaminate water
 26200 by disposal.
 26250
 26300 Some local and state waste disposal regulations may vary
 26350 from the following recommendations. Disposal procedures
 26400 should be reviewed with appropriate authorities to
 26450 ensure compliance with local regulations.
 26500
 26550 FOR SPECIFIC INSTRUCTIONS SEE "SPILL AND LEAK
 26600 PROCEDURES" BELOW.
 26650
 26700 3. DISPOSAL OF EMPTY FLASKS
 26800 U a. Method_One: Triple rinse flasks and stoppers
 26850 with water. Then offer for recycling or reconditioning,
 26900 or puncture and dispose of them in a sanitary landfill
 26950 or other approved site or by other procedures
 27000 approved by state and local authorities. Dispose of
 27050 rinsate in a sanitary landfill or by other approved
 27100 procedures. Small quantities can be poured out on
 27150 the ground.
 27200
 27300 U b. Method_Two: Remove lids and place empty flasks outdoors
 27350 until residue in flasks is reacted. Puncture and
 27400 dispose of them in a sanitary landfill or other
 27450 approved site or by other procedures approved by
 27500 state and local authorities.
 27550
 27600 L. SPILL AND LEAK PROCEDURES
 27650 1. GENERAL
 27700 A spill, other than incidental to application or normal
 27750 handling or punctured flasks can produce high levels of
 27800 gas, and therefore, attending personnel must wear a SCBA
 27850 or its equivalent when the concentrations of hydrogen

- 27900 phosphide gas is unknown. If the concentration is
 28000 known, other NIOSH/MSHA approved respiratory protection
 28050 can be worn. Wear dry cotton or other gloves when
 28100 handling spilled material.
 28150
- 28200 2. DAMAGE TO FIBERBOARD CASE
 28250 Check aluminum flasks. If they are damaged handle as
 28300 described below. If they are undamaged return them to
 28350 cardboard cartons or other suitable packaging which
 28400 complies with DOT regulations.
 28450
- 28500 3. LEAKING FLASK PROCEDURES
 28550 If aluminum flasks have been punctured or damaged
 28600 causing a leak, the product may be immediately used, the
 28650 container may be temporarily repaired with aluminum tape
 28700 or the Detia(R) may be transferred from the damaged
 28750 flask to a sound metal container which should be sealed
 28800 and properly labeled as aluminum phosphide. Transport
 28850 the damaged containers to an area suitable for pesticide
 28900 storage for inspection. Further instructions and
 28950 recommendations may be obtained, if required, from
 29000 Research Products Company.
 29050
 29100 Handle empty damaged containers as described under
 29150 "DISPOSAL OF EMPTY FLASKS" above.
 29200
- 29250 4. SPILL PROCEDURES
 29300 Do not flush spillage down drain with water. DO NOT
 29350 use water at anytime to clean up a spill. Water in
 29400 contact with unreacted tablets or pellets will rapidly
 29450 accelerate the production of hydrogen phosphide gas and
 29500 could cause spontaneous ignition of the gas. If the
 29550 spill is only a few minutes old and is not contaminated
 29600 by other materials, collect the spillage and place it
 29650 back into the original flask or other sound metal
 29700 container and tighten the cap. If possible, use
 29750 immediately. CAUTION: AN IGNITION MAY OCCUR WHEN THESE
 29800 CONTAINERS ARE REOPENED.
 29850
 29900 If the spilled material is contaminated or has begun to
 29950 visibly decompose, gather it up and place it into open
 30000 top, perforated gallon cans and process it immediately.
 30050
 30100 Do not add more than about one flask (2 to 3 lbs.) of
 30150 spilled material to the bucket. If on-site
 30200 deactivation is not feasible, these open containers
 30250 should be transported in open vehicles to a suitable
 30300 area away from occupied buildings. Wet or dry
 30350 deactivation must then be carried out as described in the
 30400 section immediately below.
 30450
- 30500 U 5. DEACTIVATION AND DISPOSAL OF UNREACTED OR PARTIALLY REACTED
 30600 TABLETS OR PELLETS

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a. Wet Method

Transport material by hand or in open vehicles to open air away from occupied structures. Fill a drum 2/3 full with water.

Add 1/4 cup of low sudsing detergent or surfactant in each gallon of water. Each flask of tablets or pellets should be mixed with no less than 1 gallon of water/detergent solution. Slowly pour the material into the water as it is stirred. Stir occasionally thereafter for at least 36 hours. Appropriate respiratory protection must be worn. DO NOT COVER THE CONTAINER. IF THE CONTAINER IS COVERED THE HYDROGEN PHOSPHIDE BEING GENERATED WILL BE CONFINED AND WILL DECOMPOSE EXPLOSIVELY. The wet method of deactivation is the method of choice for quantities in excess of 5 flasks (10 to 15 pounds). It is safe to dispose of this slurry.

Dispose of the resulting deactivated slurry, with or without preliminary pouring out of excess water, at a sanitary landfill or other suitable burial site approved by local authorities. Where permissible this slurry may be poured into a storm sewer or out onto the ground.

b. Dry Method

As an alternative to the wet method, when permissible small amounts (up to 5 flasks) of partially reacted or unreacted material may be spread out in an open, secure area away from occupied buildings to be deactivated by atmospheric moisture.

NOTE: Never place pellets, tablets, their dust or the dust/water slurry in a confined container such as a closed drum or plastic bags. Any hydrogen phosphide generated will be confined and may decompose explosively.