STAM® M-4

ROHM AND HAAS
PHILADELPHIA, PA. 19105

HERBICIDE

ACTIVE INGREDIENT

propanil	
3',4'-dichloropropionanilide	43.5%*
INERT INGREDIENTS	56.5%
TOTAL	100.0%

*Equivalent to 4 lbs. active ingredient per gallon.

This product contains the toxic inert ingredient Isophorone

EPA REG NO. 707-109

NOTICE: Before using this product, read the entire Precautionary Statements, Condition of Sale and Warranty, Directions for Use, Use Restrictions and Storage and Disposal Instructions. If the Conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

ACCEPTED
FEB 12 1991

KEEP OUT OF REACH OF CHILDREN

WARNING

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Irritating to eyes and skin. Harmful if swallowed or absorbed through skin. May be harmful if inhaled. Do not get in eyes or on skin. Wear eye and skin protection when handling. Do not take internally. Avoid breathing spray mist.

STATEMENTS OF PRACTICAL TREATMENT

IF IN EYES: Flush eyes with large amounts of water for at least 15 minutes. Consult a physician if irritation persists.

IF ON SKIN: Wash affected area with soap and water.

IF SWALLOWED: Dilute by giving two glasses of water to drink and call a physician. Never give anything by mouth to an unconscious person. NOTE TO PHYSICIAN: Emesis is recommended.

IF INHALED: Remove victim to fresh air. Treat the person symptomatically. If irritation persists, call a physician.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water except as specified on this label. Do not contaminate water when disposing of equipment washwaters.

Water drained from treated rice fields must not be used to irrigate other crops or released within 1/2 mile upstream of a potable water intake in flowing water (e.g. river, stream, etc.) or within 1/2 mile of a potable water intake in a standing body of water, such as a lake, pond or reservoir.

CONDITIONS OF SALE AND WARRANTY

Rohm and Haas warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. **ROHM AND HAAS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE.** Handling, storage and use of the product by Buyer or User are beyond the control of Rohm and Haas and Seller. Risks such as crop injury, ineffectiveness or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pest, drift to other crops or property or failure to follow label directions will be assumed by the Buyer or User. **IN NO CASE WILL ROHM AND HAAS OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.**

DIRECTIONS FOR USE
(FOR RICE GROWN IN SOUTHERN UNITED STATES ONLY)

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

RE-ENTRY AND WORKER PROTECTION STATEMENTS

Do not enter treated areas without protective clothing until sprays have dried. Because certain states may require more restrictive re-entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information. Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

CHEMIGATION

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.

GENERAL INFORMATION

STAM M-4 is a selective postemergence herbicide for use in rice only for control of the following weeds:

*BARNYARDGRASS (WATERGRASS)	*Echinochloa crus-galli, E.colonum*
BEAKRUSH(SPEARHEAD)	*Rhynchospora corniculata*
COCKSPUR,GULF	*Echinochloa crus-pavonis*
CRABGRASS SPECIES	*Digitaria spp.*
CROTON, WOOLLY	*Croton capitatus*
DOCK, CURLY	*Rumex crispus*
FOXTAIL SPECIES	*Setaria spp.*
GOOSEGRASS	*Eleusine indica*
HOORAHGRASS	*Fimbristylis miliaceae*
MEXICANWEED	*Caperonia castanaefolia*
PANICUM, TEXAS	*Panicum texanum*
PARAGRASS	*Panicum purpurascens*
PIGWEED, REDROOT	*Amaranthus retroflexus*
REDWEED	*Melochia corchorifolia*
SESBANIA, HEMP (COFFEEBEAN)	*Sesbania exaltata*
SIGNALGRASS, BROADLEAF	*Bracharia platyphylla*
SPIKERUSH (WIREGRASS)	*Eleocharis spp.*

*In isolated instances, biotypes of barnyardgrass **may** develop that cannot be effectively controlled by propanil alone. Where these biotypes are known or suspected to be present, and are found in a mixed weed population in which STAM is effective, a tank mixture of STAM M-4 herbicide at 4 quarts (4 lbs. active) /A with either Prowl at 1.5 to 2 pints/A or Bolero 8EC at 3 to 4 pints/A is recommended to control barnyardgrass (up to the 3 leaf stage). These tank mixtures may reduce crop tolerance and are applied at the user's risk.

Read and observe all label directions before using. When tank mixing, always read all individual manufactures' labels. In interpreting all labels for the tank mixture, the most restrictive situations must apply.

STAM M-4 herbicide is a emulsifiable concentrate containing 4 pounds active ingredient per U.S. gallon. STAM M-4 is not a hormone-type herbicide, but kills susceptible weeds by direct contact action. For this reason, thorough coverage of emerged weeds is essential for best results. Only weeds which have emerged and are exposed at time of application will be controlled. STAM M-4 herbicide has no preemergence or residual herbicidal activity. Apply STAM M-4 herbicide only to fields that have been drained of flood water. STAM M-4 herbicide is most effective if applied when susceptible grasses and broadleaf weeds are small and growing actively under favorable soil moisture and weather conditions. Early weed control removes competition, saves moisture and generally contributes to increased yields.

TIMING AND DOSAGE RECOMMENDATIONS

Treat grassy and weedy fields when a satisfactory stand of rice that will tolerate flooding is established. The amount of STAM M-4 herbicide to apply depends primarily upon the stage and growth condition of the grasses. The growth stage of the rice is also a factor in dosage and timing limitations, so as to avoid the possibility of excessive residues.

For best results apply STAM M-4 herbicide at the rate of 3 to 4 quarts. (3 to 4 lbs. active) per acre when the grasses are actively growing in the 1 to early 4 leaf stage. This rate will also control many seedling broadleaf and aquatic weeds. Generally this will be 15 to 25 days after planting of the rice. In order to insure satisfactory weed control, do not apply less than 3 quarts of STAM M-4 herbicide per acre in a single spray application.

Apply STAM M-4 herbicide at the rate of 4 to 6 quarts (4 to 6 lbs. active) per acre to actively growing grasses in the 4 to 6 leaf and early tillering stage or when they are in the 2 to 4 leaf stage, but stressed under dry soil conditions. Generally this will be 20 to 30 days after planting of the rice.

EMERGENCY TREATMENT: Apply STAM M-4 herbicide at the rate of 5 to 6 quarts (5 to 6 lbs. active) in 15 gallons of spray per acre for emergency control of older tillering grass.

Generally this will be 30 to 40 days after planting. If the field is already flooded, the water should be lowered or drained before spraying to expose more of the grass and weeds. Emergency treatment should be considered as a salvage operation only and cannot be relied upon for total control of grass and weeds.

TO AVOID EXCESSIVE RESIDUES AT HARVEST, DO NOT APPLY AFTER THE END OF TILLERING FOR THE RICE VARIETY BEING TREATED. DO NOT APPLY MORE THAN A MAXIMUM OF SIX POUNDS ACTIVE INGREDIENT PER ACRE IN A SINGLE APPLICATION OR EXCEED EIGHT POUNDS ACTIVE INGREDIENT PER ACRE TOTAL DOSAGE PER SEASON.

APPLICATION EQUIPMENT

Aircraft- Fixed wing aircraft or helicopters should have well-designed spray systems that produce a uniform pattern of medium-fine spray droplets. Apply STAM M-4 herbicide on small grass in no less than 10 gallons of total spray per acre with boom-nozzle sprayers. Increase volume to 12 to 15 gallons per acre for larger or denser stands of grass or during periods of low humidity.

The optimum effective spray swath width depends on operating conditions and type of aircraft being used. For uniform spray coverage with fixed-wing aircraft, do not exceed a spray swath width 10 percent greater than the wingspan or the length of the boom in helicopters. Measure the swaths accurately for flagging.

Ground Sprayers- Use standard low-pressure herbicide sprayers equipped with boom and flat fan nozzles. Use nozzle sizes that deliver a medium-fine droplet in 15 to 20 gallons total spray per acre at 40 to 50 psi and at ground speeds not in excess of 3 to 4 mph. Avoid raising boom too high. Spray patterns should meet uniformly.

Flush all equipment with clear water after each day's use. Clean all equipment, including nurse tanks used for STAM M-4 herbicide, with detergent wash followed by a water rinse, BEFORE AND AFTER spraying other pesticides or other crops. Applicators and flagmen should avoid contact with spray mist from STAM M-4 herbicide or any pesticides and should wear protective clothing and goggles. Wash thoroughly after exposure.

CROP TOLERANCE AND GROWING CONDITIONS

All leading commercial varieties of rice are exceptionally tolerant to STAM M-4 herbicide. A temporary yellowing or tip burn of rice may be noted after treatment, but new growth is normal. Severe leaf burn and partial killing of rice may occur if the product is applied when rice is under stress and in a weakened growth conditions due to disease or insect infestations, excessive soil salts, overwatering, or prolonged drought and extremely hot weather. Growers are cautioned not to spray under such conditions and/or when maximum daily temperatures have been or are expected to go above 100°F.

EFFECT OF CLIMATIC CONDITIONS AND CULTURAL PRACTICES ON WEED CONTROL

Field and Seedbed Preparation

Fields should be accurately leveled and contoured and have well-prepared seedbeds free of clods. This encourages uniform and rapid emergence of rice, grass and broadleaf weeds and permits better timing and coverage of STAM M-4 herbicide sprays resulting in optimum weed control.

Water Management

Before application of STAM M-4 herbicide, drained or dry planted fields should be flushed as often as needed to prevent drying and crusting. Flushing encourages uniform emergence and vigorous growth of grass, broadleaf weeds and rice which is essential for best results. Flush fields in sufficient time so that weeds and rice are actively growing at time of treatment. Make sure the field is drained prior to treatment so that grasses and broadleaf weeds are fully exposed. Weeds that are partially submerged in standing water at time of application will not be satisfactorily controlled

After treatment, treated fields should always be flooded before a second infestation of grass has a chance to develop. To prevent more grass from germinating after treatment, fields should be flooded within 24 hours after spraying, or as soon as possible after 24 hours.

Temperature

The temperature a few days before and after applying STAM M-4 herbicide has an important bearing on the weed-killing activity. The activity increases as daily maximum temperatures increase above 75°F and decreases as the daily maximum temperatures decline below 75°F. Do not apply STAM M-4 herbicide when maximum temperatures have been or are expected to stay below 65°F or to go above 100°F. Low temperature at time of application is not so important as long as it warms up later during the day.

Relative Humidity and Rain

Grasses and weeds are more responsive to STAM M-4 herbicide during periods of high humidity when the foliage is moist or covered by dew. When the humidity is very low some of the spray may crystalize in the air. When this condition exists increase spray volume to 12 to 15 gallons per acre for best results. Do not spray when rain threatens within six hours, to avoid loss of the spray deposit before adsorption by the grass.

Wind

Avoid applications when the wind speed exceeds 10 mph because of drift hazard to sensitive crops and the possibility of uneven (streaked) applications.

COMPATIBILITY WITH OTHER CHEMICALS

Tank-mix applications of STAM M-4 herbicide with other herbicides, insecticides, spray adjuvants or liquid fertilizers may reduce crop tolerance and/or weed control or impair mixing properties. Use of these products in tank-mix applications with STAM M-4 herbicide is done at the user's risks.

Insecticides
Severe injury or kill of rice plants may result from tank-mix combinations or separate sprays of STAM M-4 herbicide and certain insecticides. Do not combine STAM M-4 herbicide with carbamate insecticides such as carbaryl (Sevin, etc.) methomyl (Lannate, Nudrin, etc.) or organophosphorus insecticides such as parathion, methyl parathion, Guthion, malathion, Systox, EPN, Phoshamidon, etc. Do not apply any of the above insecticides to rice fields within 14 days before or after STAM M-4 herbicide. Do not use carbamate or systemic organophosphorus insecticides on rice fields to be treated with STAM M-4 herbicide.
Do not apply STAM M-4 herbicide to rice fields that were planted with rice seed treated with bird repellents containing methiocarb such as Mesurol, Borderland Red, etc. Consult local Extension specialist for current recommendations of approved insecticides on rice.

USE RESTRICTIONS
Do not apply to any crop other than rice. STAM M-4 herbicide injures most crops except cereal grains and perennial grasses. Avoid drift or accidental application from turning aircraft on cotton, soybeans, corn, safflower, seedling legumes, vegetables, orchards, vineyards, gardens, shrubs and ornamentals. Once applied, it does not release fumes hazardous to nearby crops.

STORAGE AND DISPOSAL

STORAGE: Do not use, pour, spill or store near heat or open flame. Ground all metal containers when transfering product. Protect from freezing If stored below 32°F and crystals form, warm to 72°F for 24 hours, periodically shaking or rolling container to reconstitute.

PESTICIDE DISPOSAL: Do not contaminate water, food, or feed by storage or disposal. Pesticide wastes are toxic. 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 region office for guidance.

CONTAINER DISPOSAL
Metal Containers: Triple rinse(or equivalent) then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by other procedures approved by State and local authorities.
Bulk Containers: Drain thoroughly and return to specified destination for cleaning and reuse.
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Eliminate ignition sources. Ventilate area. Avoid breathing vapors. Use MSHA/NIOSH self-contained breathing apparatus or air mask for large spills in confined areas. Dike the spill with inert material (sand, earth, fuller's earth, etc.) and if appropriate transfer the liquid and solid diking material to separate containers for recovery or disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Wash clothing before reuse. Keep out of all sewers and open bodies of water. Refer to Precautionary Statements.

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