

Best copy available

707-112

03/28/1977

1/3

# STAM<sup>®</sup> GX-4

## 4 LB. EC.

### POST-EMERGENCE GRASS AND WEED KILLER

#### WARNING

#### KEEP OUT OF REACH OF CHILDREN

Avoid breathing spray mist. Do not get in eyes or on skin. In case of contact, flush skin and eyes with plenty of water; for eyes get medical attention. Do not take internally. Do not store near feed or foodstuffs.

This product is toxic to fish. Keep out of lakes, streams, or ponds. Do not contaminate water by cleaning of equipment or disposal of wastes.

Do not reuse empty container. Destroy it by perforating or crushing or return to drum reconditioner after washing. Add washings to the spray tank. Bury or discard in a safe place.

DO NOT USE, POUR, SPILL OR STORE NEAR HEAT OR OPEN FLAME. Do not store at temperatures below 15°F.

#### ACTIVE INGREDIENT

3', 4'-Dichloropropionanilide ..... 44.5%\*

INERT INGREDIENTS ..... 55.5%

\*Equal to 4 lbs. of the active ingredient per gallon. TOTAL 100.0%

U.S. Patent No. 3,816,092

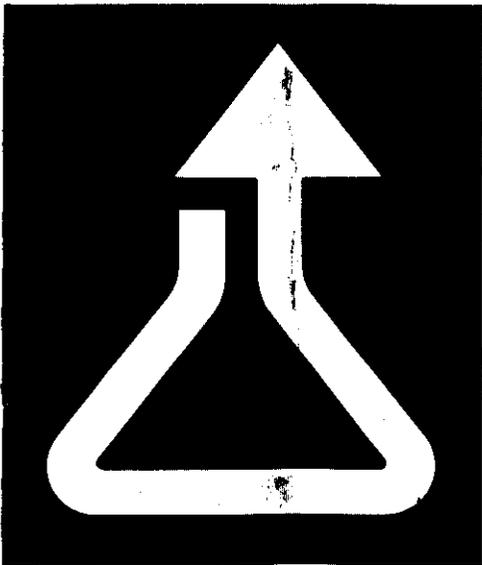
CONTAINS METHANOL

EPA Reg. No. 707-112-AA

EPA Est. No. 707-PA-1

#### NET CONTENTS

# 30 GAL.



# ROHM AND HAAS

PHILADELPHIA, PA. 19105

### DIRECTIONS FOR USE (Southern United States Only)

**RICE**—STAM GX-4 is a selective postemergence herbicide for control of barnyardgrass and related grass species and certain other weeds in rice. Mix by adding only to water and apply as a spray.

STAM GX-4 is more effective on succulent, actively growing grass and weeds. For best results apply STAM GX-4 when all conditions are as near optimum as possible. Read the directions completely and follow carefully.

**TIMING AND DOSAGE**—Treat grassy and weedy fields when a satisfactory stand of rice that will tolerate flooding is established. Use STAM GX-4 at ¾ to 1½ gallons (3 to 6 lbs. active ingredient) in at least 10 gallons of water per acre depending on the stage and condition of growth of grass and weeds and according to the prevailing climatic conditions.

A dosage range is recommended for each stage or size of grass. The lower rates are suggested for ideal conditions when soil moisture is adequate and the grass is growing actively, daily temperatures reach 75°F or higher, humidity is medium to high, and when the grass stand is only moderately thick. Use the higher suggested dosage rates if spraying must be done when the grass is stunted or retarded due to dry soil conditions (flush the field first to encourage active growth of grass). The higher dosage should also be used during periods of cool temperatures, prolonged cloudiness, low humidity or when daily temperatures stay below 75°F or when the grass infestation is heavy or when application conditions are not entirely satisfactory.

Do not apply to second rice crop when double cropping is practiced.

**EARLY TREATMENT**—Use ¾ to 1 gallon STAM GX-4 (3 to 4 lbs. a.i.) in 10 gallons of spray per acre on barnyardgrass in the one to early four leaf stages.

**DELAYED TREATMENT**—Use 1 to 1½ gallons STAM GX-4 (4 to 6 lbs. a.i.) in 12 gallons of spray per acre on barnyardgrass in the four to five leaf and early tillering stage.

**EMERGENCY TREATMENT**—Use 1¼ to 1½ gallons STAM GX-4 (5 to 6 lbs. a.i.) in 15 gallons of spray per acre for emergency control of heavy infestations of older tillering grass. 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.

In general, early application results in more effective grass control and greater yield increases because of earlier elimination of competition from grass and weeds.

**TO AVOID EXCESSIVE RESIDUES AT HARVEST—DO NOT APPLY AFTER THE END OF TILLERING STAGE OF THE RICE OR LATER THAN THE DAYS AFTER PLANTING SPECIFIED IN THE FOLLOWING CHART ACCORDING TO EACH VARIETY OR MATURITY CLASSIFICATION OF THE RICE.**

Rice Maturity Class	Typical Variety	Average Days to End of Tillering & Date of Last Spray	Max. Single Dosage Lbs. a.i.	Total Dosage Per Season Lbs. a.i.
Early	Belle Patna	45	6	8
Mid-season	Nato	55	6	8
Late	Blue Bonnet	60	6	8

Usually one application is sufficient. If retreatment is necessary because of application error or unfavorable weather, apply as soon as possible. Do not spray later than the end of tillering date for each variety or exceed the total active STAM GX-4 per acre shown in the chart above.

### EFFECT OF CULTURAL PRACTICES AND CLIMATIC CONDITIONS

**FIELD AND SEEDBED PREPARATION**—Fields should be accurately leveled and contoured and have well prepared seedbeds, free of large clods. This encourages uniform and rapid emergence of rice, grass and weeds, and permits better timing of sprays.

**WATER MANAGEMENT BEFORE TREATMENT**—Drained or dry planted fields should be flushed as often as needed to prevent drying and crusting and to encourage uniform emergence and growth of grass, weeds and rice. Flushing is especially important during periods of low rainfall, drying winds, or high temperature. Flushing a dry field a few days before treatment stimulates active growth of grasses and weeds and makes them more susceptible to STAM GX-4. If the field cannot be flushed and the grass has been growing slowly, the higher dosage rate is recommended. For early or delayed treatment most of the standing water should be off the field at the time of spraying to give full exposure of grass and weeds. For emergency treatment the water should be lowered or drained before spraying to expose more grass and weeds.

**WATER MANAGEMENT AFTER TREATMENT**—Flooding after spraying enhances kill of grass and weeds. Flooding may be started in 12 to 24 hours if treatment has been made on actively growing grass under ideal conditions. If the treatment was made on slow growing grass during dry, cool or cloudy weather, delay flooding until 2 to 5 days afterwards to allow maximum time for absorption and translocation. When flooded the sprayed grass should be covered completely and as quickly as possible. The permanent flood may then be lowered or raised to the desired level for the variety of rice being grown.

In general, rice can be grown with shallower flooding after STAM GX-4 treatment than when water alone is used for grass control. Treated fields should always be flooded before a second infestation of grass has a chance to develop beyond the one leaf stage.

**TEMPERATURE**—Temperatures a few days before and after treatment affect the activity of STAM GX-4. Control improves as daily temperatures go above 75°F. Very poor control may result during periods of low temperature or in periods of high temperature and low humidity. Low temperature at the time of actual application is not so important as long as it warms up later during the day. Do not apply STAM GX-4 when daytime temperatures are expected to stay below 65°F. Do not spray when temperatures are above 90°F at time of application.

**HUMIDITY**—A significant amount of spray may evaporate in the air during application at low humidity. For best results, do not apply STAM GX-4 when the relative humidity is below 40%.

Fields may be treated when grass is either dry or wet with dew but do not spray if rain threatens within 6 hours.

**TIME OF SPRAYING**—Successful applications of STAM GX-4 have been made throughout the day or night as long as wind and atmospheric conditions have remained favorable. However, early morning or nighttime appli-

**Directions for use—continued**

ation is usually preferable when, generally, winds are at a lower velocity, the air is less turbulent and the humidity is higher.

**APPLICATION**

**MIXING AND COMPATIBILITY**—STAM GX-4 contains 4 lbs. of active ingredient per gallon and must be added to water for application as a spray. Severe injury or death of rice plants may result from combinations of or separate sprays of STAM GX-4 and certain insecticides. Do not combine STAM GX-4 with Sevin<sup>®</sup> (carbaryl) or any organic phosphate insecticide such as parathion, methyl parathion, Guthion<sup>®</sup>, malathion, Systox<sup>®</sup>, Phosphamidon<sup>®</sup>, etc. Do not apply any of the above insecticides at high dosage for rice insect control to rice fields within 14 days before or after STAM GX-4. Low dosages of phosphate insecticides as used for mosquito larvae or shrimp control in rice fields, such as 0.1 lb. parathion per acre, may be applied five days before or after STAM GX-4 treatment. Do not use systemic phosphate insecticides such as Di-Syston<sup>®</sup>, Thimet<sup>®</sup>, etc. on rice fields to be treated later with STAM GX-4. Combinations of STAM GX-4 with 2,4-D, 2,4,5-T, CPA or other herbicides are not recommended for use on rice. Most chlorinated hydrocarbon insecticides such as toxaphene, endrin, and heptachlor may be used before or after STAM GX-4 in separate sprays or as seed treatments.

**EQUIPMENT**—Use aerial or ground sprayers. Flush tanks and pumps with clear water after each day's use. Clean all equipment including nurse tanks used for STAM GX-4 with a 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 GX-4 and should wear protective clothing and goggles. Wash thoroughly after exposure.

**AIRCRAFT**—Fixed wing aircraft or helicopters should have well designed spray systems that produce a uniform pattern of medium spray droplets. Apply STAM GX-4 to small grass in no less than 10 gallons per acre. Increase to 12 to 15 gallons per acre for larger or thicker grass or during periods of low humidity.

Swath width varies with the aircraft but spray should overlap uniformly without streaks or spots. Measure 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 droplet size of 40 to 60 microns total spray per acre at 40 to 50 p.s.i. and at ground speed in range of 3 to 4 m.p.h. Avoid raising boom too high. Spray patterns should meet or overlap uniformly.

**OPERATING CONDITIONS**—Avoid spraying when weather conditions favor drift. Do not spray to drift onto susceptible crops such as cotton or soybeans. Sensitive plants may be severely injured. A cross-wind is desirable for aerial application.

Fields may be treated when grass is either dry or wet with dew but do not spray if rain has fallen within 6 hours.

Do not spray in dead calm or when winds are gusty, when the air is turbulent, or during periods of temperature inversions, strong thermals, low humidity or extremely high temperatures.

**DRIFT HAZARD TO OTHER CROPS**—STAM GX-4 INJURES MOST CROPS EXCEPT CEREAL GRAIN AND PERENNIAL GRASSES. AVOID DRIFT OR

ACCIDENTAL APPLICATION ON COTTON, SOYBEANS, CORN, MILO, SAFFLOWER, SEEDLING LEGUMES, VEGETABLES, ORCHARDS, VINEYARDS, GARDENS, SHRUBS, AND ORNAMENTALS.

THE RICE GROWER AND THE APPLICATOR MUST ASSUME THE RESPONSIBILITY FOR PREVENTING DRIFT DAMAGE AND TAKE THE NECESSARY PRECAUTIONS DICTATED BY CONDITIONS PREVAILING AT THE TIME OF SPRAYING. ONCE STAM GX-4 IS APPLIED IT WILL NOT RELEASE FUMES HAZARDOUS TO NEARBY CROPS.

**RICE INJURY**—All commercial varieties of rice are exceptionally tolerant of STAM GX-4. A yellowing or tip burn of rice may be noted after treatment, but new growth is normal. Severe leaf burn may occur when it is weakened by extremely hot weather, soil salts, over-watering, low fertility, or other causes. Growers are cautioned not to spray under these conditions.

**GRASSES AND WEEDS CONTROLLED WITH STAM GX-4**

**GRASSES**—STAM GX-4 is used primarily for the control of barnyardgrass also known as millet, watergrass, purple or blue stem, or Baronet grass; jungle rice also known as little barnyardgrass or short millet; gulf cockspur; crabgrass; Texas millet or Colorado grass; paragrass; goosegrass, and brachiaria.

**BROADLEAF WEEDS**—Several broadleaf weeds, commonly pests in rice fields, are also controlled with STAM GX-4. These include northern joint vetch (bashfulweed, coffeeweed, curly indigo); Mexicanweed (birdye, Texasweed); redweed (teaweed); redroot pigweed; hemp sesbania (coffeebean, sennabeen, tall indigo); water plantain, and wooly croton (goatweed).

**SEDGES**—Several troublesome sedges are also controlled with STAM GX-4. These include hoorahgrass; jointed sedge, nut-sedge or seed coco; spike rushes and spearhead (tadpole sedge, horned bear-rush).

**Effect on Other Species**—Perennial species such as cattail, bulrush, nut-grass, Johnsongrass, knotgrass, long-tom, and others which develop from well established roots, rhizomes, or corms may be temporarily injured by STAM GX-4 but usually recover. Such aquatic species as duck salad, arrow-head lilies and redstem may be injured by STAM GX-4 but usually develop in Southern rice fields after the normal time of treatment for barnyardgrass. Sprangletop and red rice are not controlled with STAM GX-4.

**CONSULT LOCAL AGRICULTURAL AUTHORITIES FOR FURTHER RECOMMENDATIONS ON DOSAGE, TIMING, WATER MANAGEMENT, AND CULTURAL PRACTICES TO MEET LOCAL CONDITIONS.**

**NOTICE:** Seller warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied extends to the use, storage or handling of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use. These risks include, but are not limited to damage to plants, crops and animals to which the material is applied, failure to control pests, damage caused by drift to other plants or crops, and personal injury.

ACCEPTED

MAR 22 1977

U.S. FEDERAL INSECTICIDE

707-112