

U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (H7505C) 401 "M" St., S.W. Washington, D.C. 20460

NOTICE OF PESTICIDE:

<u>x</u> Registration
Reregistration

(under FIFRA, as amended)

EPA Reg.

Date of Issuance:

707-266

23 February 1998

Term of Issuance:

Conditional

Name of Pesticide Product:

STAMPRO

Name and Address of Registrant (include ZIP Code):

Rohm and Haas Inc.,

Philadelphia, PA 19106

Note: Changes in labeling differing in substance from that accepted in commection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

- 1. Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
  - 2. Make the following label changes:
    - a. Revise the EPA Registration Number to read, "EPA Reg. No. 707-266".
      - b. PAGE 1 In the "ACTIVE INGREDIENTS" section, replace "Methyl 2-[(4,6-dimethoxypyrimidin-2-yl)amino]carbonyl]]amino] sulfonyl]methyl] benzoate" with "Bensufuron methyl: Methyl 2-[[[[(4,6-dimethoxypyrimidin-2-yl) amino]carbonyl]amino]sulfonyl]methyl]benzoate".
    - c. Page 8 The second sentence in the section "Insecticides" under "Compatability with Other Chemicals" should read as follows: "Do not combine STAMPRO with carbamate insecticides such as parathion, methyl parathion, Guthion, malathion, Systox, EPN, Phoshamidon, etc.
    - d. Page 10 The word "CAUTION" at the bottom of the page should be replaced with "IMPORTANT".

Signature of Approving Official:

23/706/1558

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page 2 EPA Reg. No.

3. Submit two copies of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

# STAMPRO



## HERBICIDE

FOR USE ON RICE IN THE STATES OF ARKANSAS, LOUISIANA, MISSISSIPPI, MISSOURI, AND TEXAS

#### **ACTIVE INGREDIENT**

propanil

3', 4'-dichloropropionanilide 80.2%

Total 100.0 %

EPA REG NO 202-EAA
EPA EST NO 5905IA-01

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.

# KEEP OUT OF REACH OF CHILDREN WARNING AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

#### STATEMENT OF PRACTICAL TREATMENT

If in eyes, flush eyes with large amounts of water for at least 15 minutes. Get medical attention.

If on skin, wash affected area with plenty of soap and water. Get medical attention if irritation persists.

If swallowed, call a physician or poison control center. Drink one or two glasses of water and induce vomiting by touching back of throat with fingers. Do not induce vomiting or give anything by mouth to an unconscious person.

If inhaled, remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

For medical emergencies involving this product, call: 215-592-3000

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### WARNING! CAUSES EYE IRRITATION.

Do not get in eyes, on skin, or clothing. Avoid breathing spray mist. Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

# Personal Protective Equipment (PPE) Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standards (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### USER SAFETY RECOMMENDATIONS

#### Users should:

• Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

#### **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, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not treat irrigation ditches, or water used for crop irrigation or water used for domestic uses. 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.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Water-proof gloves
- · Shoes plus socks
- Protective eyewear

#### 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.

#### **CHEMIGATION**

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

IMPORTANT: Injury to or loss of desirable trees or vegetation may result from failure to observe the following

- Do not apply or drain or flush equipment on or near desirable trees or other plants, or in 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 spray to desirable plants.
- Keep from contact with fertilizers, insecticides, fungicides, and seeds during storage.

Injury to or loss of subsequently sprayed crops may result from failure to observe the following procedures:

STAMPRO<sup>™</sup> must be cleaned from application equipment prior to spraying crops
other than rice, according to cleanup procedures described in the sprayer cleanup
section of this label

injury to or loss of adjacent sensitive crops and vegetation may result from failure to observe the following:

 Avoid all direct or indirect (such as spray drift) contact with crops other than rice or land scheduled to be planted with crops other than rice because most crops other than rice are sensitive to STAMPRO

#### **GENERAL INFORMATION**

STAMPRO<sup>TM</sup> is a postemergence herbicide for the control of many annual grasses and broadleaf weeds in rice. It may be applied by either ground or aerial spray equipment after dilution and thorough agitation with water. Thorough spray coverage of weeds is necessary for best results. STAMPRO<sup>TM</sup> is a unit package product. When using this product the entire contents of the bag must go into the spray tank. Failure to use the entire contents of the bag could result in reduced weed control or crop injury.

STAMPRO<sup>™</sup> should be applied when weeds and grasses are small and in the seedling stage. Use only on rice fields which have been drained of flood water. Fields to be treated should be inspected frequently before the application of STAMPRO<sup>™</sup> to insure that grass and weeds are at the proper stage of growth (one to three-leaf stage with an occasional four-leaf plant). The degree and duration of control may depend on the following:

- use rate
- · weed spectrum and infestation intensity
- weed size at application
- growing conditions at and following treatment
- soil pH, texture and organic matter content
- water management

ATTENTION: Never apply except as recommended on this label because use in any other way may result in damage or injury to persons, animals, or crops, or other unintended consequences.

Before applying STAMPRO<sup>™</sup>, make sure the spray equipment is properly calibrated to avoid over- or under-treatment.

STAMPRO™ is a selective postemergence herbicide for use in rice only for control of the following weeds:

#### WEEDS CONTROLLED

Common Name	Scientific Name	Common Name	Scientific None
Common Name	Scientific Name	Common Name	Scientific Name
Barnyardgrass (watergrass)*	Echinochloa crusgalli or Echinochloa colonum	Hoorahgrass	Fimbristylis miliaceae
Brachiaria	Brachiaria spp.	Mexicanweed	Caperonia castanaefolia
Beakrush (Spearhead)	Rhynchospora corniculata	Jointvetch, Northern (curly indigo)	Aeschynomene virginica
Cocklebur	Xanthium spinosum	Paragrass	Panicum pupurascens
Cockspur, Gulf	Echinochloa crus-pavonis	Smartweed, Pennsylvania	Polygonum pensylvanicum
Crabgrass, species	Digitaria spp.	Pigweed, redroot	Amaranthus retroflexus
Croton, wooly	Croton captatus	Redstem**	Ammannia auriculata
Dock, Curly	Rumex crispus	Redweed	Melochia corchorifolia
Eclipta .	Eclipta alba	Flatsedge, rice	Cyperus iria
Foxtail Species	Setaria spp.	Millet, Texas	Panicum texanum
<del>-</del>		(Texas panicum)	1
Goosegrass	Eleusine indica		
Gooseweed	Sphenoclea zeylanica	Texasweed	Caperonia palustris
Sesbania, Hemp	Sesbania exaltata	Wiregrass (Spikerush)	Eleocharis spp.
(coffee bean)	1		[
Morningglory (annual)	1	Yellow nutsedge	Cyperus esculentus
Entireleaf	Ipomea hederacea <sup>1</sup>		
Ivyleaf	Ipomea hederacea	1	}
Palmleaf	Ipomea wrightii		
Pitted	Ipomea lacunosa		

- integriuscula variety
- \* 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 STAMPRO™ is effective, a tank mixture of STAMPRO™ herbicide at 5.05 lbs. (4.03 lb. active)/A with either Prowl at 1.5 to 2 pints/A or Bolero 8EC at three to four pints/A, or Facet at labeled rates recommended to control barnyardgrass (up to the three-leaf stage).
- \*\* Naturally occurring resistant biotypes of these weeds are known to exist. STAMPRO<sup>TM</sup> will not control these resistant biotypes. Tank mixtures with alternate chemistry are recommended where these biotypes are known or suspected to be present. When tank mixing, always read all individual labels and observe all label directions before using. In interpreting all labels for the tank mixture, the most restrictive situations must apply.

The addition of a crop oil concentrate at one to two pints per acre or a spray adjuvant, such as LATRON<sup>TM</sup> CS-7 or LATRON<sup>TM</sup> AG-98 (or other 80 percent active nonionic surfactant) at a rate of one to two pints per 100 gallons of spray mixture is recommended. 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 manufacturers' labels. In interpreting all labels for the tank mixture, the most restrictive situations must apply.

STAMPRO<sup>™</sup> is a combination product that contains STAM 80EDF herbicide and Londax 60DF herbicide. For this reason, thorough coverage of emerged weeds is essential for best results. Apply STAMPRO<sup>™</sup> only to fields that have been drained of flood water. STAMPRO<sup>™</sup> 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 increase yields.

STAMPRO<sup>TM</sup> acts primarily on grasses and weeds which have already germinated. (Maximum activity usually is not apparent until five to seven days after application.) To prevent more weeds from germinating after treatment, fields should be flooded within 24 hours after spraying, or as soon as possible after 24 hours. Flooding after spraying will improve the grass control after STAMPRO<sup>TM</sup> treatment. In cases where flooding of the field would not be complete within 24 to 48 hours or less after application of STAMPRO<sup>TM</sup>, it is best to treat a portion of the field, flood that treated portion, and then treat the remainder. This will help prevent reinfestation of weeds and grasses.

#### RATES

Single Treatment: Use one bag (50.5 lb) for every 10 acres of rice. This will be 5.05 lbs. of product (4.03 lbs. active) per acre.

Sequential Applications: For best results in controlling grasses, broadleaf weeds, and sedges, make sequential applications of STAMPRO<sup>™</sup>. Make a first application of STAMPRO<sup>™</sup> at 3.79 to 5.05 lbs of product (3.02 to 4.03 lbs. active) per acre when grasses, broadleaf weeds, and sedges are in the one- to early four-leaf stage and actively growing. Make the second application just prior to establishment of the permanent flood. As in the first application, all weeds should be in the one- to early four-leaf stage. Fields should be flooded within 24-48 hours after second treatment. Do not exceed 8.0625 lbs. active per acre per season of STAMPRO<sup>™</sup>.

Important: STAMPRO<sup>™</sup> is a unit package product. When using STAMPRO<sup>™</sup>, the entire contents of the bag must go into the spray tank. When using the lower rate of 3.79 lbs. of product per acre the unit package will treat 13.3 acres. When using the higher rate of 5.05 lbs. of product per acre, the unit package will treat 10 acres. Allow for this in the treatment calculations so that the entire contents of the bag will be used. Failure to use the entire contents of the bag could result in reduced weed control or crop injury.

Avoid treatment if rain threatens within eight hours or if high winds may cause uneven application or drift.

The grower should inspect fields frequently to determine proper time of application. The ideal application time is when most barnyardgrass has one to three leaves, with only an occasional plant having four leaves. During drought conditions grasses may reach the three-leaf stage while still quite short or stunted, so special attention to stage of growth is necessary in these situations to avoid grasses becoming too mature for best results.

### SPRAY PREPARATION AND GALLONAGE (AERIAL OR GROUND APPLIED):

For AERIAL APPLICATION, dilute the proper amount of STAMPRO<sup>™</sup> with 10 to 12 gallons of water per acre. If humidities are low, increase to 12 to 15 gallons of water per acre. For GROUND EQUIPMENT dilute the proper amount of STAMPRO<sup>™</sup> with 15 to 25 gallons of water per acre. Less amounts of water often give inadequate coverage and may cause poor results.

**Spray Tank Preparation:** Spray equipment must be clean and free of deposits before using STAMPRO<sup> $^{\text{IM}}$ </sup>. Deposits in spray equipment can trap STAMPRO<sup> $^{\text{IM}}$ </sup> and inhibit cleanup of the spray equipment after use. Therefore before spraying STAMPRO<sup> $^{\text{IM}}$ </sup>, clean the equipment according to the cleanup procedures specified on the label of the product previously sprayed.

Spray Mixture Preparation: With the pump and agitator running, slowly add the recommended amount of STAMPRO into a partially filled mix tank for aerial application or spray tank for ground application. STAMPRO is a unit package product. When using this product the entire contents of the bag must go into the spray tank. When mixing, use clean water (water that is free of sediment and agricultural chemicals) in the tank. Do not use water from paddies. The jet or tank agitators must be correctly positioned to create a rippling or rolling action on the liquid surface and to provide complete agitation on the bottom of the tank, preventing dead spots where the material can accumulate. A centrifugal pump is suggested to provide additional propeller shear action for dispersing and mixing this product. Keep filling and bypass lines below the liquid surface. The STAMPRO herbicide may be applied with conventional low pressure herbicide sprayers. It is not recommended to add STAMPRO directly to the spray tank of aircraft. Once properly dispersed in mix tank, pump to plane (include rinsate from mix tank). Maintain good agitation throughout application.

Thoroughly mix STAMPRO™ with clean water before adding any other material (i.e., tank mix partner and drift agent). To ensure tank mix compatibility, test the desired mixture prior to use.

The use of a nonionic surfactant (minimum 80 percent active ingredient) at 0.25 percent v/v (one qt per 100 gal), or a crop oil concentrate at 1 percent v/v (one gal per 100 gal) is recommended. Always apply STAMPRO™ spray preparations within 24 hours of product mixing, or the product may degrade.

#### CROP TOLERANCE AND GROWING CONDITIONS

Occasionally, treated rice may suffer temporary chlorosis and/or growth retardation after treatment with STAMPRO<sup>TM</sup>. These symptoms, which intensify in cold water and at high ambient temperatures, are normally temporary and disappear with two to three weeks after application. 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 condition 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.

#### COMPATIBILITY WITH OTHER CHEMICALS

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

#### Insecticides

Severe injury or kill of rice plants may result from tank-mix combinations or separate sprays of STAMPRO herbicide and certain insecticides. Do not combine STAMPRO with carbamate insecticides such as carbaryl (Sevin, etc.), methomyl parathion, Guthion, malathion, Systox, EPN, Phosphamidon, etc. Do not apply any of the above insecticides to rice fields within 14 days before or after STAMPRO herbicide. Do not use carbamate or systemic organophosphorus insecticides on rice fields to be treated with STAMPRO.

Do not apply STAMPRO herbicide to rice fields that were planted with rice seed treated with bird repellents containing methicarb such as Mesurol, Borderland Red. etc. Consult local Extension specialist for current recommendations of approved insecticides on rice.

## 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 STAMPRO herbicide sprays resulting in optimum weed control.

#### Water Management

Before application of STAMPRO 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 weeds from germinating after treatment, fields should be flooded within 24 hours after spraying, or as soon as possible after 24 hours.

Loss of the permanent flood following applications of STAMPRO<sup>™</sup> combinations may result in poor performance due to regrowth of treated plants or reinfestation by newly germinated weeds.

Runoff caused by rainfall, overflow, levee breach, seepage, or introduction of new water soon after treatment may reduce product performance.

NOTE: When STAMPRO<sup>™</sup> is applied, especially after the fourth leaf stage of growth of the rice, under some conditions, visible leaf injury on rice may result. However, the rice plants quickly outgrow such injury when caused by the later applications.

**Temperature** 

The temperature a few days before and after applying STAMPRO<sup>™</sup> 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 STAMPRO 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.

#### Wind

Do not apply STAMPRO<sup>™</sup> under windy conditions which will allow drift to adjacent susceptible crops such as corn, safflower, seedling legumes, beans, soybeans, cotton, safflower, cucurbits, vegetables, orchards, vineyards, gardens, shrubs, ornamentals and other sensitive crops. Wind velocity greater than five miles per hour will often cause applications to be streaked and give less than maximum herbicidal control.

#### **USE RESTRICTIONS**

- To avoid excessive residues at harvest, do not apply after the end of tillering for the rice variety being treated.
- Do not apply STAMPRO<sup>™</sup> more than a maximum of 5.05 lbs. of product (4.03 lbs. active ingredient) per acre in a single application or exceed 10.1 lbs. of product (8.0625 lbs. active.) per acre per season.
- Do not apply STAMPRO<sup>™</sup> within fourteen days before or after insecticide applications because serious damage to rice may occur.
- Do not use on wild rice (Zizania spp.).
- Do not graze treated fields or feed treated forage within 80 days of last application.
- Do not rotate to crops other than rice for 120 days following application.
- Do not apply to any crop other than rice. Avoid drift or accidental application to adjacent susceptible crops such as corn, safflower, seedling legumes, beans, soybeans, cotton, safflower, cucurbits, vegetables, orchards, vineyards, gardens, shrubs, ornamentals and other sensitive crops.
- Do not apply to fields where commercial catfish farming is practiced. Do not drain water from treated fields into areas where catfish farming is practiced.

Only approved drift control agents for Londax (e.g. Chemtrol) may be used with STAMPRO<sup>TO</sup>. Do not use any other additives except as directed by this label.

Do not store STAMPRO<sup>™</sup> in nurse tanks or any other tanks used to store or transport clean water. Install one-way valves (anti-siphoning devices) on lines and hoses of mixing/loading equipment to prevent contamination of nurse tanks or other clean water sources.

Mixing and application equipment exposed to STAMPRO<sup>™</sup> cannot be used for anything other than rice applications until it has been cleaned according to the procedures in the Sprayer Cleanup section of this label.

#### SPRAYER CLEANUP

Before using equipment exposed to STAMPRO<sup>™</sup> to treat another crop, clean the sprayer and any other equipment (loading hoses, batch tanks, etc.) using the following procedure:

- 1. Steam-clean tank using a nonchlorine-based detergent, taking care to remove all physical residues.
- 2. Thoroughly rinse sprayer, tanks, boom, and hoses with clean water (free of sediment and agricultural chemicals).
- 3. Fill the tank one-half full with clean water and add a spray tank cleaner, i.e., Nutra-sol at 32 oz per 100 gal of water. Fill the tank to capacity with clean water. Flush the nozzles, boom, and hoses, and agitate (and recirculate, if possible) the sprayer for 15 minutes. Drain the equipment, taking care to flush the boom and hoses thoroughly.
- 4. Rinse tanks, hoses, and nozzles with clean water to remove a spray tank cleaner, i.e., Nutra-sol.
- 5. Fill the tank one-half full with clean water and add one gal of 21 percent ammonia or seven gal of 3 percent ammonia per 100 gal of water. Fill the tank to capacity with clean water. Flush the nozzles, boom, and hoses, and agitate (and recirculate, if possible) the sprayer for 15 minutes. Drain the equipment, taking care to flush the boom and hoses thoroughly.
- 6. Remove nozzles, screens, and strainers, and clean them separately.
- 7. Rinse tanks, booms, and hoses with clean water.
- 8. Repeat Steps 5 and 7 an additional three times.
- 9. Rinse tanks, booms, and hoses to remove all traces of ammonia.
- 10. Dispose of the rinsate on site or at an approved waste disposal facility.

Note: When applying multiple loads of STAMPRO<sup>™</sup> several days in a row, the following procedure must be performed at the end of each day; partially fill the tank with fresh water, flush the boom and hoses, and allow to sit overnight.

CAUTION: Do not use chlorine bleach with ammonia. All traces of liquid fertilizer containing ammonia, ammonium nitrate or ammonium sulphate must be rinsed from the mixing and application equipment using water before adding chlorine bleach solution. Failure to do so will release a gas with musty chlorine odor that can cause eye, nose, throat, and lung irritation. Do not clean equipment in an enclosed area.

Perform cleanup procedures on batch tanks and any other mixing equipment separately from aircraft hoppers. Take care to clean loading hoses and any other equipment or surfaces exposed to STAMPRO™.

#### SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

#### AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

Importance of Droplet Size: The most effective way to reduce drift potential is to apply large droplets (>150-200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See "Wind," "Temperature and Humidity," and "Temperature Inversions" sections of this label.

## Controlling Drop Size—General Techniques

<u>Volume</u>—Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

<u>Pressure</u>—Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE. <u>Nozzle Type</u>—Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

### Controlling Droplet Size—Aircraft

<u>Number of Nozzles</u>—Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.

<u>Nozzle Orientation</u>—Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.

<u>Nozzle Type</u>—Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.

<u>Boom Length</u>—The boom length should not exceed 3/4 of the wing or rotor length—longer booms increase drift potential.

<u>Application Height</u>—Application more than 10 ft above the canopy increases the potential for spray drift.

#### BOOM HEIGHT

Setting the boom at the lowest reference height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### WIND

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. AVOID GUSTY OR WINDLESS CONDITIONS.

**Note:** Local terrain can influence wind patterns. Every application should be familiar with local wind patterns and how they affect spray drift.

#### TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

#### TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

#### AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

Note: Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the spray equipment section of this label to determine if use of an air assist sprayer is recommended.

#### STORAGE AND DISPOSAL

STORAGE: Do not use, pour, spill or store near heat or open flame.

Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food, or feed by storage. Not for use or storage in or around the home. Keep container closed. PESTICIDE DISPOSAL: Do not contaminate water, food, or feed by disposal. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes can not be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA regional office for guidance.

CONTAINER DISPOSAL: PAPER BAGS: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay our of smoke.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Sweep or shovel into containers for disposal or reworking. Keep dusting to a minimum. Flush contaminated area with a large amount of water to a chemical or sanitary sewer containing a settling pit.

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