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MAY 1 8 1993

Ms. Karen R. Blundell BASF Corp. Ag. Products P.O. Box 13528 Research Triangle Park, NC 27709-3528

Dear Ms. Blundell:

Subject: Final Printed Labels
STORM® HERBICIDE
EPA Reg. No. 7969-76
Your submission dated April 30, 1993

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records.

Sincerely yours,

Robert J. Taylor Product Manager 25 Fungicide-Herbicide Branch Registration Division (H7505C)

Enclosure

RD:RTaylor:eja:5/18/93:3056800

BASF

Storm[®] herbicide

ATTENTION IS IN EPA Letter Duted:

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Postemergence Herbicide

For broad spectrum weed control in soybeans and peanuts

A soluble liquid formulation containing:

Active ingredients*

Total	100 0%
Inert ingredients	57.4%
5-[2-chloro-4-(trifluoromethyl)phenoxy]-2-nitrobenzoate	
Sodium salt of acifluorfen: sodium	
1H-2,1,3-benzothiadiazin-4(3H)-one-2,2-dioxide	29.2%
Sodium sait of bentazon, sodium (3-isopropyi-	

*Equivalent to 2.67 pounds per gallon bentazon: 3-isopropyl-1 H-2,1,3-benzothiadiazin-4-(3H)-one 2,2-dioxide; and 1.33 pounds per gallon of sodium acifluorfen, sodium 5-[2-chloro-4-(trifluoromethyl) phenoxy]-2-nitrobenzoate.

EPA Reg. No. 7969-76

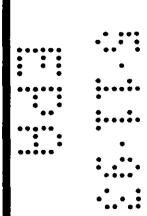
KEEP OUT OF REACH OF CHILDREN.

DANGER/PELIGRO

FRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta haya sido explicada ampliamente.

Net contents 2 ½ gallons

BASF CorporationP.O. Box 13528, Research Triangle Park, NC 27709



Specimen Label

Precautionary Statements

Hazards to humans

Danger

Causes irreversible eye damage. Harmful if swallowed, inhaled or absorbed through the skin. Do not get in eyes. Wear goggles or face shield when handling. Wear rubber gloves when mixing/loading. Avoid breathing vapor or spray mist and contact with skin or clothing. In case of contact, immediately remove contaminated clothing and shoes. Wash thoroughly with soap and water after handling. Wash contaminated clothing with soap and hot water before re-use. This product may cause an allergic skin response.

Statement of practical treatment

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

If on skin: Wash with plenty of soap and water. Consult a physician if irritation persists.

If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

Note to physician: Emesis is recommended.

Environmental hazards

Do not apply directly to water or wetlands. Do not contaminate water when disposing of equipment washwaters. Do not apply when weather conditions favor drift from target area.

Re-entry and workers protection statements

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. 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 Départment of Agriculture for further informa-

Directions for use

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

Storage and disposal

Keep from freezing. Store above 32°F.

Do not contaminate water, food or feed by storage or disposal.

Pesticide wastes are acutely hazardous. 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 Regional Office for guidance.

Container disposal

Plastic containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. **Bulk/mini-bulk containers:** Refillable/reusable containers should be returned to the point of purchase for

cleaning and refilling. Refillable/reusable containers must be thoroughly cleaned before refilling.

In case of emergency

In case of large-scale spillage regarding this product, call:

CHEMTREC

800-424-9300

BASF Corporation

800-832-HELP

In case of medical emergency regarding this product, call:

- 1. Your local doctor for immediate treatment.
- Your local poison control center (hospital).
 BASF Corporation 800-832-HELP.

800-832-HELP.

Steps to be taken in case material is released or spilled:

Dike and contain spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing and wash affected skin areas with water. Wash clothing before re-use. Keep spill out of all sewers and open bodies of water.

General information

Storm* herbicids is intended for selective posternergence control of certain broadleaf weeds in soybeans and peanuts. Storm may provide partial control of some grasses. Storm is effective mainly through contact action; therefore, weeds must be thoroughly covered with spray. Storm may cause some soybean leafspeckling and leaf-bronzing to occur under certain conditions. (See Restrictions and limitations.)

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Timing of application

Apply **Storm** early postemergence when weeds are small and actively growing, and before weeds reach the maximum size listed in the **Application Rate Table**.

In peanuts, apply from cracking through two expanded tetrafoliate leaves. Soybeans would generally be in the 2 to 3 trifoliate stage. Early application to weeds produces the most beneficial effect on weed control, and makes it easier to obtain thorough spray coverage. Delay in application which permits weeds to exceed the maximum size stated will result in inadequate control.

Cultivation before or during application is not recommended. Cultivation may put weeds under stress, thus making control more difficult to obtain. Timely cultivation 5-7 days after application will usually assist in weed control.

Water volume and spray pressure

Apply recommended rates of Storm as follows:

Ground equipment: Use a minimum of 20 gallons of water per broadcast acre and a minimum of 40 psi pressure (measured at the boom, not at the pump or in the line). When crop and weed foliage is dense use up to 50 gallons of water and up to 80 psi pressure. Use standard high pressure pesticide hollow cone or flat fan nozzles spaced 20 inches apart. Do not use flood, whirl chamber or controlled droplet applicator (CDA) nozzles.

Air equipment: Use 5-10 gallons of water per acre and a maximum of 40 psi pressure. Use only diaphragm-type nozzles producing cone or fan spray patterns.

Aerial application - special directions

To obtain uniform coverage and to avoid drift hazards, the following application equipment and practices should be used:

Nozzle height: 6 to 10 feet above crop.

Nozzle orientation: Nozzles must be oriented so as to discharge straight back with the air stream (opposite the direction of travel of the aircraft) and not more than 20 degrees downward.

Nozzles must not be located further out than three-fourths the distance from the center of the aircraft to the end of the wing or rotor.

Do not apply **Storm** by aircraft when wind is blowing at a velocity above 10 mph. Coarse sprays (larger droplets) are less likely to drift.

Do not apply **Storm** by air if ornamentals or sensitive non-target crops, such as cotton, sugar beets, sunflowers or okra, are within 200 feet downwind.

Applicator must follow the most restrictive use cautions to avoid drift hazards, including those found in this labeling as well as applicable state and local regulations and ordinances.

Spray additives

Additives are needed with **Storm** to achieve consistent weed control. Either crop oil concentrate, urea ammonium nitrate (UAN) or nonionic surfactant are recommended. Directions for use of each follow.

Oil concentrate

A nonphytotoxic oil concentrate (commonly referred to as oil concentrate) can be added to the spray tank with **Storm.** The oil concentrate must contain either a petroleum or vegetable oil base and must meet the following criteria: 1) be nonphytotoxic, 2) contain only EPA-exempt ingredients, 3) provide good mixing quality in the jar test, and 4) be successful in local experience.

The exact composition of suitable products will vary; however, vegetable and petroleum oil concentrates should contain emulsifiers which provide good mixing quality. For vegetable oil concentrates, it has been observed that highly refined vegetable oils are more satisfactory than unrefined vegetable oils. For additional information see **Jar test for estimating suitability of oil concentrates** on page 4.

With the addition of oil concentrate to **Storm** on soybeans and peanuts, a leaf burn may occur, but generally all new growth is normal and crop vigor is not reduced. The potential for leaf burn is increased when relative humidity and temperature are high. A few oil concentrates have exhibited excessive leaf burn. Refer to your supplier for information concerning successful local experience prior to purchasing any oil concentrate

Rate of oil concentrate

Ground application - 2 pints/acre (maximum)
Air application - 1 pint/acre (maximum)



1. Water supply: Use only water from intended source and at the source temperature.
2. Amount of water in jar: Ground application - For 20 gals./A spray volume use 3 ½ cups or 800 ml of water. Air application - For 10 gals./A spray volume use 1% cups or 400 ml of water. For other spray volumes, adjust proportionately to above.

 Amount of Storm and oil concentrate to add: Add Storm herbicide and oil concentrate at the rate of 1 teaspoon or 5 ml for each pint of recommended label rate.

Add components in following sequence, gently mixing between component additions:

a. Storm

b. Oil concentrate

Cap jar, invert 10 cycles, let stand for 15 minutes, evaluate.

Evaluation: An ideal tank mix combination will be uniform, thus, the suitability of the oil concentrate is questionable if any of the following are observed:

Free oil (film or globules) at the surface.

Flocculation - fine particles which may be suspended in the liquid or found as a precipitated layer at the bottom of the jar.

Clabbering - thickening texture (coagulated) resembling yogurt or a curd-like texture as with cottage cheese.

Urea ammonium nitrate (UAN)

Commonly referred to as 28%, 30% or 32% nitrogen solution, may be added in place of other spray additives for improved pigweed and velvetleaf control. The standard use rates are: ground application - 1/2 to 1 gallon/acre and air application - ½ gallon/acre.

Nonionic spray surfactants

The standard recommendation is 1-2 pints of an 80% active nonionic spray surfactant per 100 gallons of water. Consult the spray surfactant label for specific recommendations.

Mixing/spraying

Fill a thoroughly cleaned sprayer half to two-thirds full with clean water. Start agitation and add **Storm**; allow to mix thoroughly. Add spray additive and remaining volume of water. Maintain constant agitation during application.

Restrictions and limitations

Do not apply more than 1½ pints of **Storm** per application or more than a total of 3 pints of **Storm** per acre per season in soybeans or peanuts.

In both soybeans and peanuts, an additional 2.0 pints of **Basagran' herbicide** may be applied following an application of 3 pints of Storm per acre per season, but no additional application of Blazer' herbicide should be made.

In both soybeans and peanuts, an additional 3 pints of **Basagran** or 1 pint of **Blazer** may be applied following an application of 1½ pints of **Storm** per acre per season.

Do not apply sequential applications of **Blazer** or **Storm** within 15 days following the initial application of Storm

Do not apply **Storm** to soybeans or peanuts that have been subject to stress conditions such as hail damage, flooding, drought, injury from other herbicides or widely fluctuating temperatures, as crop injury may recult.

Do not apply **Storm** to soybeans or peanuts that show injury (leaf phytotoxicity and/or plant stunting) produced by any other prior herbicide applications, because this injury may be enhanced and/or prolonged. Physical incompatibility, reduced weed control, or crop injury may result from mixing **Storm** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. BASF does not recommend the use of **Scrim t**ank mixes other than those listed on BASF labels, supplemental labels, or technical bulletins. Local agricultural authorities may be a source of information when using other than BASF approved tank mixes.

In the Southeast infurrow treatments of insecticides/nematicides may predispose peanuts to injury from **Storm**. Do not apply **Storm** during prolonged periods of drought or during unseasonably cold weather, as unsatisfactory weed control may fesult

Rainfall soon after application may reduce the effectiveness of **Storm**

Clean sprayer thoroughly prior to application of **Storm**, particularly if a herbicide was used which has the potential to injure the crop to be sprayed

In case of crop failure, only soybeans or peanuts may be immediately replanted

Crop rotation restriction. Root crops (such as carrots, turnips, sweet potatoes, etc.) must not be planted in fields treated with Storm for a period of 18 months following treatment

Restrictions and limit ons - cont'd.

Do not apply Storm within 50 days of soybean harvest and 75 days of peanut harvest.

Do not use treated plants for feed or forage.

Avoid drift to all other crops and nontarget areas.

Do not apply **Storm** through any type of irrigation system.

Overhead irrigation within 8 hours of application may nullify the effectiveness of Storm.

Table 1

Application Rate Table - Soybeans and Peanuts

Apply **Storm** when weeds are small and actively growing and before weeds reach the maximum size listed below. Such applications generally correspond to the soybean growth stages of unifoliate to two expanded trifoliate leaves and in peanuts to two expanded tetrafoliate leaves. Soybeans and peanuts may experience yellowing, bronzing, speckling, or burning of leaves under certain conditions but generally recover within 10 days.

Application for Weed Growth Stages

Weeds Controlled	Leaf Stage up to	Max. Height	Rate of Storm per Acre	Spray Additive Rate/Acre
Anoda, Spurreda Carpetweed Cocklebur Crotalaria Croton, Trupic , Woolly Jimsonweed Ladysthumb Lambsquartersa Mallow, Venice Morningglories Mustard, Wild Nightshade, Black Pigweed, Redroot , Smooth Ragweed, Common , Giant Redweed Sesbania, Hemp Sida, Prickly or Teaweeda Smartweed, Pennsyivania Starbur Bristly Texasweed Volvetleafa	4 3" diam. 6 6 2 2 6 6 6 6 6 6 6 4 4 4 4 4 6 6 3 4 6	2* 6° 6° 2° 6° 6° 2° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8°	1½° pts.	See pages 3 & 4 for details 1-2 pts. oil concentrate or ½-1 gal UAN or 1-2 pts./100 gals surfactant

^{*}Control may be inconsisent with this rate of **Storm**. A later application of **Basagran** may be necessary (see label for **Basagran**).

Storm + Classic tank mix in soybeans

General information

A tank mix of **Storm** plus Classic* herbicide is recommended for the additional drahlyroved cohlible of bristly starbur. Florida beggarweed, sicklepod, and wild sunflower

Do not apply this tank mix when soybeans are exhibiting injury from previously applied pesticides or are exhibiting stress symptoms from disease, nematodes, insects, excessive fertilizer or poil salts, wind injury; frost damage or high temperature stress or wilt, as increased crop response will result

Timing of applications

For optimum control, apply **Storm** + Classic to actively growing weeds before they exceed the growth stage and size as specified on each respective label.

^bSequential applications of 1½ pints/acre of **Storm** can be made for controlling subsequent weed flushes or escaped weeds before they reach the maximum weed size listed.

Storm + Classic tank mix in oybeans - cont'd.

Rate

Use 1½ pints of Storm® herbicide mixed with up to ¾ ounce of Classic for each acre being treated.

Spray additive

Adjuvants are needed with **Storm** plus Classic to achieve consistent postemergence weed control. The standard label recommendation is one to two pints of an 80% active nonionic spray surfactant per 100 gallons of spray mixture.

Water volume and spray pressure

For additional information refer to the section entitled **Directions for use**, page 2.

Ground equipment

Use a minimum of 20 gallons of water per broadcast acre and a minimum of 40 psi pressure (measured at the boom, not at the pump or in the line). Use standard high pressure pesticide hollow cone or flat fan nozzles spaced 20 inches apart. Do not use flood, whirl chamber or controlled droplet application (CDA) nozzles. Adjust the height of the boom above the crop to give complete coverage of all weeds. Maintain sufficient agitation during mixing and spraying to insure a uniform spray mixture.

Air equipment

Use a minimum of 5-10 gallons of water per acre. Use 40 psi pressure when using flat fan nozzles and use 40-60 psi pressure when using hollow cone nozzles. Consult the respective labels for special directions for aerial applications.

Mixing

Fill tank of a thoroughly clean sprayer one-half to two-thirds full with clean water. Start agitation and add the recommended amounts of product in the following order – Classic, **Storm**, spray adjuvants; then add the emaining quantity of water.

Restrictions and limitations (partial list)

Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies.

Do not apply this tank mix to soybeans that have been subjected to stress conditions such as drought; flooding; frost or hall damage; high temperature stress or wilt; injury from herbicides or excess fertilizer or soil salts; wind injury; widely fluctuating temperatures; stress symptoms from disease, nematodes or insects; cold temperatures when maximum daily temperature is below 70°F or soil temperature is below 60°F as weeds will not be actively growing and control may be reduced.

Do not apply the tank mix of **Storm** plus Classic within 60 days of soybean harvest

Do not use treated plants for feed or forage.

Do not apply this tank mix through any type of irrigation system.

Avoid drift to all other crops and nontarget areas.

Follow rotational restrictions as provided on each herbicide's respective labeling.

Thoroughly clean sprayer prior to and immediately after application of this tank raix

Storm + 2,4.DB tank mix in peanuts

General information

A tank mix of **Storm** plus 2,4-DB is recommended for control of larger morningglory, cocklebur, common ragweed, redroot pigweed, jimsonweed, burgherkin and citron in peanuts when the weed size exceeds that specified in **Table 1**. Control with this mix may decrease with increasing weed size or density of weed or crop canopy due to poor spray coverage. Do not apply the tank mix when peanuts are exhibiting injury from previously applied pesticides or are exhibiting stress symptoms from disease, nematodes, insects; excessive fertilizer or soil salts; wind injury; frost damage or high temperature stress or wilt; as increased crop response will result.

Timing of applications: "." :

For optimum control apply Storm plus 2,4.DB tank mix to actively growing weeds up to the 8-inch stage, usually 3 to 12 weeks after planting. Applications at later weed stages will result in partial control or suppression

Peanuts should be at least 2 weeks old when using a tank mix of **Storm** and 2,4-DB. Do not use after pod-filling stage begins.

Continued on next page.

Storm + 2,4-DB tank nex in peanuts - cont'd.

Rate

Mix up to 1 pint of Butyrac* 200, or Butoxone* with 1½ pints of Storm for each acre being treated.

Spray additives

Add 1 pint of an 80% active nonionic surfactant per 100 gallons or 1-2 pints of oil concentrate per acre to increase control of weeds. The addition of adjuvants will increase the hormonal 2,4-DB crop response.

Water volume and spray pressure

For additional information refer to the section entitled Directions for use, page 2.

Ground equipment

For best results, the tank mix should be applied with ground equipment. For broadcast application and thorough coverage of weeds apply with flat fan or hollow cone nozzles spaced 20 inches apart in a minimum of 20 gallons of water per acre with a spray pressure of 40 psi.

Air equipment

Use a minimum of 10 gallons of total spray solution per acre. Aerial applicators should review Restrictions and limitations and Drift hazards.

Mixing

Fill the spray tank one-half to two-thirds full with water and add the recommended amount of **Storm** 2,4-DB, spray adjuvant while the agitator is running, then add the remaining quantity of water.

Drift hazards

Care must be taken when applying the tank mix to prevent drift to all non-target crops. Tobacco, ornamentals, mustards, sugar beets, potatoes, vegetables and cotton are a few of the crops known to be sensitive to this tank mix. Hormone type injury in nontarget crops can result from trace amounts of 2,4-DB drift. The use of any cleared drift control agent may reduce this hazard; however, the drift control agent may also decrease the weed control activity.

Restrictions and limitations (partial list)

Read and follow all directions and use restrictions on **Storm** and 2,4-DB labels.

Do not apply the tank mix within 75 days of harvest for peanuts.

Do not apply more than one application of the tank mix to peanuts per growing season

Do not use rates of **Storm** or 2,4-DB in excess of those recommended on this label, or excessive injury and possible yield reduction could result.

Do not rnix oils, liquid fertilizers or other pesticides with this tank mix except as specifically directed on this label or on other approved supplemental labeling.

Aerial applicators must be familiar with EPA-registered labels and follow the use precautions. In addition, aerial applicators should follow all applicable state and local regulations. In interpreting the label and the local regulations, the most restrictive limitations should apply to avoid hazards.

Table 2

Storm + 2,4-DB Tank Mix in Peanuts Application Rate Table

Product	Product Rate	Weeds Controlled See Table 1 for weeds controlled, leaf stage, maximum height.		Additive information
Storm	1½ pts. per Acre			Surfactant 1. 2 n 200
plus	plus —	Weeds Controlled		Surfactant 1-2 pm/
Butyrac 200° or Butoxone	8-16 oz /A	Burgherkin Citron Cocklebur Jimsonweed	Morningglory Pigweed, Redroot Ragweed, Common	or 1-2 pts. bil concentrate/A

When weed size exceeds those specified on Table 1

The addition of a nonicnic adjuvant will increase the hormonal 2,4-DB crop response

The following are specific names for the weeds listed in this section. For specific recommendations on control of these weeds refer to the Application Rate Table.

Broadleaf Weeds

Common Name	Scientific Name		
Anoda, Spurred	Anoda cristata		
Butterprint (see Velvetleaf)			
Buttonweed (see Velvetleaf)	J		
Carpetweed	Mollugo verticillata		
Cocklebur	Xanthium strumarium		
Crotolaria	Crotalaria spectabilis		
Croton, Tropic	Croton glandulosus		
, Woolly	Croton capitatus		
Jimsonweed 2	Datura stramonium		
Ladysthumb	Polygonum persicaria		
Lambsquarters, Common	Chenopodium album		
Mallow, Venice	Hibiscus trionum		
Morningglory, Cypressvine	Ipomoea quamoclit		
. Entireleaf	lpomoea hederacea		
, = , , , , , , , , , , , , , , , , , ,	var. intergruscula		
, lvyleaf	Ipomoea hederacea		
Palmleaf	Ipornoea wrightii		
Pitted	Ipomoea lacunosa		
, Purple Moonflower	locmoea muricata		
Smallflower	Jacquemontia tamnifolia		
, Tall (common)	Ipomoea purpurea		
Mustard, Wild	Sinapis arvensis		
Nightshade, Black	Solanum nigrum		
Pigweed, Redroot	Amaranthus retroflexus		
Smooth	Amaranthus hybridis		
Ragweed, Common	Ambrosia artemisiilolia		
Giant	Ambresia trifida		
Redweed	Melochia corchorifolia		
Sesbania, Hemp	Sesbania exaltata		
Sida, Prickly	Sida spinosa		
Smartweed, Pennsylvania	Polygonum pensylvanicum		
Starbur, Bristly	Acanthospermum hispidum		
Texasweed	Caperonia palustris		
Teaweed (see Prickly Sida)			
Velvetleaf	Abutilon theophrasti		
Waterhemp, Tall	Amaranthus tuberculatus		

Condition of sale and warranty

The Directions for use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASE CORPO-RATION ("BASF") or the Seller. All such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for use, subject to the inherent risks referred to above. BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL BASE OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. BASE and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing Conditions of sale and warranty which may be varied only by agreement in writing signed by a duly authorized representative of BASF

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Butyrac is a registered trademark of Rhone-Poulence

Classic is a registered trademark of ET duPont de Nemours & Company, Incorporated © 1991, 1993 BASE Corporation

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BASF Corporation

Research Triangle Park, NC 27709

