Defol

Defol® 5
Defoliant/Desiccant with Fire Retardant

ACTIVE INGREDIENT:
Sodium chlorate ........................................ 42.3%

OTHER INGREDIENTS: ................................. 57.7%

TOTAL: .................................................... 100.0%

This product contains 5 pounds of Sodium chloride per gallon.

KEEP OUT OF REACH OF CHILDREN
CAUTION
See FIRST AID Below

FIRST AID

IF IN EYES:
• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
• Call a poison control center or doctor for treatment advice.

IF SWALLOWED:
• Call a poison control center or doctor immediately for treatment advice.
• Have person sip a glass of water if able to swallow.
• Do not induce vomiting unless told to do so by a poison control center or doctor.
• Do not give anything by mouth to an unconscious or convulsing person.

IF ON SKIN OR CLOTHING:
• Take off contaminated clothing.
• Rinse skin immediately with plenty of water for 15 to 20 minutes.
• Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact CHEMTREC at 800-424-9300 for emergency.

PRECAUTIONARY STATEMENTS

Hazard to Humans and Domestic Animals
CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)
Some materials that are chemical-resistant to this product are made of any waterproof material such as polyethylene or polyvinyl chloride. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart. All mixers, loaders, applicators, and other handlers must wear:
- Long-sleeved shirt and long pants, shoes and socks.
- Follow manufacturer’s instructions for cleaning/maintaining PPE.
- If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product’s concentrate.

Do not reuse them.

(Continued)
APPLICATION
DEFOL 5 may be applied by aircraft or ground equipment. It is essential that the foliage be thoroughly covered. The specified dilution rates should be carefully observed. A non-ionic surfactant such as Surf-Ac® 8200 or similar crop oil such as Peptoil™ may enhance the results. This product should not be mixed with insecticides or other organic materials, unless specifically recommended, because a fire or explosion may result.
Precautions should be taken to avoid having spray or spray drift contact adjacent crops or desirable vegetation or they may be defoliated. Equipment should be washed before and after use and care should be taken so that product does not dry in tank or on spray nozzles. Washwater should not be allowed to contact desirable vegetation.
When using this product under dry land conditions, injury may occur to rotational crops.

SPRAY DRIFT MANAGEMENT
A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Wind Speed
Do not apply at wind speeds greater than 15 mph.

Droplet Size
Apply as a medium or coarser spray (ASAE Standard 572).

Temperature Inversions
If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height.
Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Other State and Local Requirements
Applicants must follow all state and federal pesticide drift requirements regarding application of sodium chloride. Where states have more stringent regulations, they must be observed.

Equipment
All application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Additional Requirements for Aerial Applications
1. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
2. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.
3. When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind.

Additional Requirement for Groundboom Application
Do not apply with a nozzle height greater than 4 feet above the crop canopy.

DEFOLIATION
Ideally, defoliation is favored on clear, calm, sunny days with high temperatures and high humidity. If rain is anticipated within 24 hours, application should be delayed whenever possible. Defoliation may be slowed when daytime temperatures are below about 60°F and with some crops, especially with vigorous varieties, regrowth can occur. In order to obtain acceptable defoliation results, the crop must be fully mature. In most cases, the signs of maturity include:
1. A slight discoloration of the foliage is apparent, often with a yellowish or reddish tinge.
2. Vegetative growth has slowed or ceased, with little or no secondary growth.
3. A slight downward pull on a leaf gives a clean break from the stalk. Adequate fertility, ample soil moisture, good insect control and good weed control also favor defoliation. Plants which have been under stress as from drought or insect pressure give less reliable results because tough, wilted or damaged leaves do not permit the proper uptake of the chemical and tend to inhibit the formation of an abscission layer. Typically, under such circumstances, the leaves are desiccated but do not drop, which in turn, often causes the problems with excessive trash during harvesting. For crops where there is a heavy canopy of foliage, obtaining thorough coverage is sometimes difficult. Whenever practical, the use of ground equipment should be considered. The higher dilution rates should be used and any other available methods employed which will assure that the plants are completely covered all the way to the bottom leaves. If coverage is incomplete, a second application may be necessary in order to defoliate the lower leaves and to prevent secondary growth.

DESICCATION
When the objective is to reduce crop moisture or to desiccate weeds prior to harvest, most of the points discussed under “DEFOLIATION” are applicable. Incomplete coverage will give erratic results, especially with vines such as Morningglory where the slender stems may be sheltered from the spray by the crop canopy, leaving the vines succulent and tough so they will become entangled in the harvesting machinery. Once again, larger spray volume will encourage more complete coverage and more reliable desiccation.

CROPS
<table>
<thead>
<tr>
<th>Crop</th>
<th>Rate per Acre</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chili peppers</td>
<td>4 to 10 qts.</td>
<td>Air: 5 to 15 gals.</td>
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<tr>
<td>Cotton</td>
<td>2.4 to 4.8 qts.</td>
<td>Air: 5 to 10 gals.</td>
</tr>
<tr>
<td>Corn</td>
<td>4.8 qts.</td>
<td>Air: 5 to 7 gals.</td>
</tr>
<tr>
<td>Cotton</td>
<td>2.4 to 4.8 qts.</td>
<td>Air: 5 to 10 gals.</td>
</tr>
<tr>
<td>Corn</td>
<td>4.8 qts.</td>
<td>Air: 5 to 7 gals.</td>
</tr>
</tbody>
</table>

SPECIFIC DIRECTIONS: Apply 10 days before harvest. To be used on Peppers for processing only. Consult a processor before applying.

SPECIFIC DIRECTIONS: Air Application – Apply this product in sufficient water to make 4 to 10 gals. total solution per acre. Use the lower rate when plants and weather conditions are ideal for defoliation. Swath width should not exceed wingspread. Altitude and speed of aircraft should be regulated to give sufficient spray coverage. DO NOT apply during periods of excessive winds as spray may drift and cause defoliation of adjoining Cotton or injury to other crops. DO NOT apply during the very high temperatures found in some areas at midday. Ground Application – Apply this product in sufficient water to make 15 to 30 gals. total solution per acre. Cotton defoliants should be applied when 70% of the bolts are open. Poor defoliation often occurs under unfavorable weather, soil moisture, fertility and plant conditions. Uniform defoliation within a field may sometimes be difficult to obtain because of irregular plant maturity. Satisfactory defoliation within a field may not be obtained when Cotton plants are suffering from lack of moisture or when plant growth is retarded by cold weather.

Apply by air or ground at least 7 days before crop harvest.

USE RESTRICTIONS: DO NOT apply more than 4.8 quarts of this product per acre per application. A maximum of one application per year is permitted, except in California, where a maximum of two applications is permitted. DO NOT graze treated fields or feed treated fodder or forage to livestock.

SPECIFIC DIRECTIONS: Make application 7 to 10 days before anticipated harvest, longer if temperatures are cool. Thorough coverage is essential. DO NOT graze treated fields or feed treated fodder or forage to livestock.

SPECIFIC DIRECTIONS: As a harvest aid to desiccate trashy weeds and to reduce moisture in the mature crop. Apply 7 to 10 days before anticipated harvest date. Thorough coverage is essential. Activity of the spray will be enhanced by the addition of a good, nonionic surfactant at the rate of 1 qt. per 100 gals. of spray. DO NOT graze treated fields or feed treated foliage and fodder for 14 days after application.

SPECIFIC DIRECTIONS: To reduce the moisture content of the grain while the crop is standing, apply 7 to 10 days before harvest. Thorough coverage is essential. Use the lower rates when grain moisture is low and the weather is clear and dry. Use the higher rate when conditions for desiccation are poor.

(Continued)
Crops (Cont.)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Rate per Acre</th>
<th>Water</th>
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</thead>
<tbody>
<tr>
<td>Guar beans</td>
<td>4.8 qts.</td>
<td>Air: 5 to 10 gals.</td>
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<td></td>
<td></td>
<td>Ground: 10 to 20 gals.</td>
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<tr>
<td>SPECIFIC DIRECTIONS: Make application 7 to 10 days before anticipated harvest date. DO NOT graze treated fields or feed treated fodder or forage to livestock.</td>
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<tr>
<td>Potatoes</td>
<td>4.8 qts.</td>
<td>Air: 5 to 10 gals.</td>
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<td>Ground: 10 to 20 gals.</td>
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<tr>
<td>SPECIFIC DIRECTIONS: To defoliate plants and facilitate harvest, apply 10 days before harvest. DO NOT apply under conditions of extreme heat during the middle of the day.</td>
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<tr>
<td>Rice</td>
<td>3.6 to 4.8 qts.</td>
<td>Air: 5 gals. (minimum)</td>
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<td>Ground: 10 to 20 gals.</td>
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<tr>
<td>SPECIFIC DIRECTIONS: Use to facilitate harvest and reduce moisture in the fully mature seed heads and to desiccate immature Red rice in mature White rice. Use the lower rate when crop conditions and weather are right to enhance rapid drying. Apply 7 to 10 days before anticipated harvest. To avoid drift, do not apply during windy weather. Thorough coverage of the crop is essential to achieve good results. DO NOT graze treated fields or feed treated straw or crop residues within 14 days of application.</td>
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<td>Safflower</td>
<td>4.8 qts.</td>
<td>Air: 5 to 10 gals.</td>
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<td>Ground: 20 to 30 gals.</td>
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<td>SPECIFIC DIRECTIONS: Use to facilitate harvest and reduce moisture in fully mature seed heads. Apply 7 or more days before normal harvest when Safflower heads are fully mature. DO NOT graze treated fields or feed treated forage.</td>
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<td>Southern peas</td>
<td>4.8 qts.</td>
<td>Air: 5 to 10 gals.</td>
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<td></td>
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<td>Ground: 10 to 20 gals.</td>
</tr>
<tr>
<td>SPECIFIC DIRECTIONS: Make application 7 to 10 days before anticipated harvest, longer if temperatures are cool. Thorough coverage is essential. DO NOT graze treated fields or feed treated fodder or forage to livestock.</td>
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<tr>
<td>Soybeans</td>
<td>4.8 qts.</td>
<td>Air: 5 gals. (minimum)</td>
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<td></td>
<td></td>
<td>Ground: 20 gals. (minimum)</td>
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<tr>
<td>SPECIFIC DIRECTIONS: Use as a harvest aid to dry weeds in early maturing Soybeans and to facilitate the harvest. Make application 7 to 10 days before anticipated harvest date when beans are mature and ready for harvest. DO NOT graze treated fields or feed treated forage.</td>
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<tr>
<td>Sunflowers</td>
<td>4.8 qts.</td>
<td>Air: 5 to 10 gals.</td>
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<td></td>
<td></td>
<td>Ground: 20 to 30 gals.</td>
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<tr>
<td>SPECIFIC DIRECTIONS: Use to facilitate harvest and reduce moisture in fully mature seed heads. When using ground application, apply with a high clearance sprayer. Make application 7 or more days before normal harvest when Sunflower heads are fully mature. DO NOT apply later than 7 days before harvest. DO NOT graze treated fields or feed treated forage within 14 days of application.</td>
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<tr>
<td>Wheat</td>
<td>4.8 qts.</td>
<td>Air: 5 gals. (minimum)</td>
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<td></td>
<td></td>
<td>Ground: 10 gals. (minimum)</td>
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<tr>
<td>SPECIFIC DIRECTIONS: Use as desiccant on Wheat. DO NOT apply more than 4.8 quarts per acre. DO NOT harvest wheat within 3 days of application.</td>
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</tbody>
</table>

STORAGE AND DISPOSAL (Cont.)

1. Contain spill. Absorb with a material such as sawdust, clay granules or dirt.
2. Collect and place in suitable containers for disposal.
3. Wash area with soap and water to remove remaining pesticide.
4. Follow washing with clean water rinse.
5. Wash contaminated clothing immediately.
6. Do not allow runoff to enter sewer or contaminate water supplies.
7. Dispose of waste as indicated below.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

Nonrefillable Container (rigid material; less than 5 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Container (rigid material; 5 gallons up to < 250 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Refillable Container (≥ 250 gallons and Bulk): Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinseate collection system. Repeat this rinsing procedure two more times.

WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically directed and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. To the extent consistent with applicable law, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.