

GENERAL INFORMATION

GRAZON PC Herbicide is a water soluble liquid product containing picloram. Very small amounts can kill or injure many broadleaved plants. To prevent damage to crops and other desirable plants, follow all directions and precautions.

Use GRAZON PC Herbicide in rangeland and permanent grass pastures to selectively control annual, biennial, and perennial herbaceous weeds such as bitterweed, bursage (bur ragweed, woollyleaf povertyweed), broomweed (annual), horsenettle, locoweed, pricklypear, ragweed (common, lanceleaf, western), snakeweed (tignon snakeweed), tasajillo, and thistles. For equal or improved control of such weeds along with many species affected by 2,4-D, use GRAZON PC Herbicide in tank mixtures with 2,4-D low volatile esters or amines or with GRAZON ET Herbicide.

Applications made according to label directions usually give excellent control of most annual and perennial herbaceous broadleaf weed species. Certain more resistant herbaceous and woody species may require repeat treatment in subsequent years.

Use GRAZON PC Herbicide only once a year. Maximum application rate for GRAZON PC Herbicide is 2 pints per acre per year.

Note: Many forbs are susceptible to GRAZON PC Herbicide. Do not spray pastures containing desirable forbs, especially legumes, unless injury to such plants can be tolerated. However, the growth of established grasses is improved after spraying, especially when rainfall is adequate and grazing is deferred.

DIRECTIONS FOR USE

Do not use for manufacturing or formulation.

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

Do not apply this product through any type of irrigation system.

Read complete use directions and precautions on this label and container label before using.

Mix the required amount of GRAZON PC Herbicide in sufficient water for uniform coverage and apply as a coarse, low-pressure spray with ground or aerial application equipment. The use of a drift control additive such as Nalco-Trol, or equivalent, is strongly recommended, especially when water alone is used as the carrier.

Broadcast Foliar Applications (Ground or Aerial)

Apply in 10 to 20 gallons of total spray mixture per acre by ground and in a minimum of 2 gallons per acre or more for aerial application, unless otherwise specified. See Mixing Directions and Tables 1 to 4 for instructions on oil-water emulsion details. Good coverage is essential. Swath width should not exceed 1/4 times the wingspan of the aircraft.

Woody Plants — Broadcast Use Recommendations

Pest	Amount of GRAZON PC (Picloram) Per Acre	Specific Directions
Pricklypear (Unburned rangeland)	1 quart (0.5 lb ae)	Best application time is generally from late August to early November. Applications at other times of the year may be less than optimum. Herbicidal activity on unburned prickly pear is very slow and may continue for two years or longer. Good coverage is essential.
Pricklypear (Burned rangeland)	1 pint (0.25 lb ae)	Install intense controlled burns during December through March. Then apply the product during mid-April through May. Rainfall following burning can also stimulate prolific resprouting of the burned plants. Good coverage is also essential.
Macartney rose Multiflora rose (Mowed and other disturbed stands, within 3 years of disturbance)	1 quart (0.5 lb ae)	Add an approved agricultural surfactant (or use an oil-water emulsion) and use higher spray volumes (20 to 25 gallons per acre by ground or a minimum of 5 gallons per acre or more by air). Avoid spraying earlier than 9 to 12 months following mowing or when plants have a high percentage of new growth. Repeat treatment when necessary. Swath width should be such as to provide adequate overlap between swaths to facilitate good coverage. Product can be applied in the spring or fall if conditions are favorable for good plant growth.

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Pest	Amount of GRAZON PC (Picloram) Per Acre	Specific Directions
Mesquite	1 to 2 pints (0.25 to 0.5 lb ae) with ½ pint of GRAZON ET or ¾ to 1 ½ pints of RECLAIM®	Higher application rates should be used east of Interstate 35 (I-35). Environmental conditions may influence results considerably. For best results on mesquite, apply in the spring or early summer during the period 40 to 90 days after the first green growth appears and when the soil moisture is adequate for good growth. Soil temperature of 78°F to 83°F at 12 inch to 18 inch depth have been reported as optimal for good plant control. Spraying should be postponed if the soil temperature is not at least 75°F at that depth. Soil temperatures will vary with soil types. Clay soils (bottomland soils) or wet soils are colder and/or slower to warm up than coarser (upland soils) or dry soils. Degree of control can vary accordingly. Frost, hail, or insect damage can reduce plant root kill and may, if severe, prohibit treatment for that year. Do not treat when plants have new (light green) terminal growth in response to heavy rainfall during the growing season. Mesquite regrowth should be at least 4 feet in height for best results with broadcast foliar applications. Do not treat more than once a year. Retreatment may not be effective unless the trees have developed sufficient leaf surface to intercept the spray. Fall treatments are not recommended. Use the product in an oil-water emulsion with the appropriate emulsifier or as a water dilution with an approved agricultural surfactant (0.25 to 0.5% volume/volume).
South Texas mixed brush (including mesquite, prickly pear, blackbrush, twisted acacia, granyeno and guajillo)	1 quart (0.5 lb ae) with 1 to 2 pts GRAZON ET or ¾ to 1 ½ pints of RECLAIM	Apply in a minimum of 4 gallons of oil-water emulsion per acre by air or 20 to 25 gallons per acre by ground. See comments listed in the Mesquite Control section.
Husache (Suppression)	1 quart (0.5 lb ae)	Fall applications are recommended. Performance can be erratic. Fall applications may not be suitable for mesquite control, nor for control of some of the other species found in the South Texas mixed brush complex.
Chinese tallowtree	1 quart (0.5 lb ae) with 2 quarts of 2,4-D ester or 1 pint of GRAZON ET	Add an approved agricultural surfactant (0.5% vol/vol) (or use an oil-water emulsion) and use higher spray volumes (20 to 25 gallons per acre by ground, or a minimum of 5 gallons per acre or more by air). The product may be applied in the spring or fall, if conditions are favorable for good plant growth.
Broom snakeweed Late Fall/Early Winter	1 pint (0.25 lb ae)	In years of less-than-normal rainfall prior to spring, apply only after flowering is completed. In years with normal to above-normal rainfall prior to or during flowering, apply the herbicide during full flower and/or active pollination, stopping with the initiation of new top growth.
Early Fall/Early Spring	1 quart (0.5 lb ae)	Applications should be made following sufficient moisture (snow or rainfall) to provide active plant growth (both basal and terminal leaves are green and actively growing).

Broadleaf Weeds — Broadcast Use Recommendations

Pest	Amount of GRAZON PC (Picloram) Per Acre	Specific Directions
Annual broomweed, bitterweed, bursage (bur ragweed), common ragweed, teasjillo, musk thistle, bull thistle	1 to 2 pints (0.25 to 0.5 lb ae)	Use the lower rate in very early season (March-April), when weeds are no more than 2 inches tall and conditions are favorable for good plant growth. Use the higher rate when weeds range from 3 inches tall to early flowering.
Bitter sneezeweed, buffalo bur, camphor weed, cocklebur, croton, marshelder (sumpweed) smartweed, sunflower, wild carrot, prickly lettuce, annual broomweed, bitterweed, bursage (bur ragweed), common ragweed, teasjillo, musk thistle, bull thistle		
Early season (March-April)	¼ to ½ pint (0.0625 to 0.125 lb ae) with 0.5 to 1 pint of the desired 2,4-D formulation	Lower tank mixes are effective only in very early season while weeds are no more than 2 inches tall and conditions are favorable for good plant growth.
Mid to late season (May-June)	½ to 1 pint (0.125 to 0.25 lb ae) with 1 to 2 pints of the desired 2,4-D formulation	Apply when weeds range from 3 inches tall to early flowering, with conditions favorable for good plant growth.
Lanceleaf ragweed	½ to 1 pint (0.125 to 0.25 ae) with 1 to 2 pints of 2,4-D	Use the lower rate in early season when weeds are no more than 2 inches tall and conditions are favorable for plant growth. Use the higher rate when weeds range from 3 inches tall to early flowering.
Bullnettle, silverleaf nightshade, upright prairie cone flower, western horse-nettle, western ragweed, yankeeweed	½ to 1 pint (0.125 to 0.25 lb ae) with 1 to 2 pints of 2,4-D	Nettles and silverleaf nightshade should be treated when the plants begin to flower in the spring. Yankeeweed should be sprayed when plants are 8 to 10 inches tall; upright prairie cone flower should be sprayed when plants are 2 to 6 inches tall, before flowering.
Common goldenweed, Drummond's goldenweed (Isocome spp.)	1 to 2 pints (0.25 to 0.5 lb ae) with 1 to 2 pints of 2,4-D	Add 0.25 to 0.5% (volume/volume) of an approved agricultural surfactant or oil-water emulsion with appropriate emulsifier. Higher spray volumes, are recommended (15 to 20 gal/A by ground and 4 to 5 gal/A by air). Apply in the spring (April-June), when good growing conditions produce substantial canopy development. Good coverage is essential.
Poisonous plants (Such as: woolly loco, garbancillo (Wooton loco) and groundsel (Senecio spp.)	¾ to 1 pint (0.1875 to 0.25 lb ae) with 1 to 2 pints of 2,4-D or 1 to 2 pints (0.25 to 0.5 lb ae)	Apply in fall or winter under good moisture conditions. Since locoweeds are difficult to wet, add an approved agricultural surfactant at 0.25 to 0.5% (vol/vol) (or apply as an oil-water emulsion). Herbicide application may increase palatability of these poisonous plants. Therefore, treated areas should not be grazed until the toxic plants dry up and lose their palatability.
Gray goldaster Narrowleaf goldaster	1 to 2 pints (0.25 to 0.5 lb ae) with 1 to 2 pints 2,4-D	Apply in the spring during the bud stage (pre-bloom). Apply in oil-water emulsion. Thorough coverage is essential.

NOTE (Ground Application Special Equipment):

To control annual and perennial weed species using special low-volume, minimum drift equipment, such as the hooded Forage Chemical Mower, apply 1 to 2 pints (0.25 to 0.5 lb picloram) of GRAZON PC Herbicide in total volumes ranging from 1 gallon to 5 gallons per acre in water alone or as an oil-water emulsion at a 1:5 and 1:4 oil-to-water ratio for 1-gallon and 5 gallon-per-acre solutions, respectively.

Repeat applications may be made in successive years if more complete control is desired. Consult your Extension Weed Specialist for local recommendations.

High-Volume Foliar Applications

Spray to thoroughly wet foliage and stems. The use of an approved agricultural surfactant is recommended. Do not use more than 1 quart of GRAZON PC Herbicide (0.5 lb of picloram) per acre. To minimize spray drift, use lowest possible pressure and a coarse spray to achieve good coverage. Keep sprays no higher than brush tops. Nalco-Trol drift control agent or equivalent is recommended. (See Table 5).

Woody Plants — High-Volume Foliar Use Recommendations

Pest	Amount of GRAZON PC/ 100 Gallons	Specific Directions
Pricklypear (burned/unburned rangeland) Broom snakeweed ✓	2 to 4 quarts (1 to 2 lb ae)	See "Broadcast Application" section for timing and specific directions.
Macartney rose ✓ Multiflora rose ✓	1 to 2 quarts (0.5 to 1 lb ae) with 2 to 4 quarts of 2,4-D	This technique can also be used for the control of large undisturbed clumps or for the control of small regrowth. Product can be applied in the spring or fall, if conditions are favorable for good plant growth.
Chinese tallow tree ✓	2 quarts (1 lb ae) or 1 to 2 quarts (0.5 to 1 lb ae) with 2 to 4 quarts of 2,4-D or with 1 quart GRAZON ET	May be treated in spring or fall if conditions are favorable for good plant growth.
Mesquite ✓	1 to 2 quarts (0.5 to 1 lb ae) with 1½ to 3 pints of GRAZON ET or 1 to 2 quarts of RECLAIM	See "Broadcast Application" section for specific application information.
South Texas mixed brush (including mesquite, ✓ pricklypear, blackbrush, ✓ twisted acacia, grayano ✓ and guajillo) ✓	2 quarts (1 lb ae) with 2 to 3 pints GRAZON ET or 1 to 2 quarts of RECLAIM	See "Broadcast Application" section on mesquite for specific application information.
Huisache (Suppression) ✓	2 quarts (1 lb ae)	Apply in the fall. See details in "Broadcast Application" section.
Junipers (Cedars) ✓ (including alligator, redberry, Utah, ✓ one-seeded, pinionpine, ✓ eastern redcedar) ✓	2 quarts (1 lb ae)	Apply in May through July. Results for ashe juniper can be variable using this technique.

Broadleaf Weed Control — High-Volume Foller Use Recommendations

Pest	Amount of GRAZON PC/ 100 Gallons	Specific Directions
Common goldenweed Drummond's goldenweed Poisonous plants (Such as: woolly loco, garbancillo (Wooton loco) and groundsel (Senecio spp).	2 quarts (1 lb ae) with 1 gallon of 2,4-D	See "Broadcast Application" section for best application timing. Herbicide application may increase palatability of these poisonous plants. Treated areas should not be grazed until toxic plants dry up and lose their palatability.
Annual broomweed, bitterweed, bursage (bur ragweed), common ragweed, tasajillo, musk thistle, bull thistle, bitter sneezeweed, buffalo bur, camphorweed, cocklebur, croton, marshelder (sumpweed), smartweed, sunflower, wild carrot, prickly lettuce, lanceleaf ragweed, bullnettle, silverleaf nightshade, upright prairie cone flower, western horse-nettle, western ragweed, yankeeweed, gray goldaster, narrowleaf goldaster	1 quart (0.5 lb ae) with 2 quarts of 2,4-D	See "Broadcast Application" section for best application timing.

Special Ground Applications

Soil Spot Concentrate (Texas and Oklahoma): Use GRAZON PC Herbicide undiluted. Applications should precede periods of expected rainfall. Apply directly to the soil within the drip-line and on the upslope side of the tree. Applications to trees taller than 15 feet is not recommended.

Pest	Amount of GRAZON PC to Use	Specific Directions
Ash Juniper	4 to 6 mL per 3 foot of plant height	Apply in the spring (April-May).
Eastern Redcedar	3 to 4 mL per 3 foot of plant height	Apply in either spring (April-May) or fall (September-October).
Eastern Persimmon	2 to 4 mL per inch of stem diameter	Apply in spring (March through May).

Carpet Roller: GRAZON PC Herbicide can be applied with carpeted rollers where drift presents a hazard to susceptible crops, surface waters and other sensitive areas. Apply to previously untreated plants less than 6 feet tall, and short enough to pass beneath the tractor without breaking off at the ground. Applications made during periods of extended drought conditions will not provide acceptable control. Do not mow, burn or otherwise disturb the treated plants during the remainder of the growing season. Operate carpeted rollers as close to the ground as possible without breaking the stems, but above the tallest grasses. Grasses

growing adjacent to treated plants may exhibit temporary injury. Maximize herbicide deposition on foliage and stems and minimize drip losses by rotating the carpeted roller at 30 to 40 rpm with the lower edge moving in the same direction as the direction of travel. Maintain the carpet sufficiently wetted to apply up to 1 gallon per acre of herbicide-water mixture to stands of average density (100 to 200 plants/acre), and up to 2 gallons per acre in dense stands (300 to 400 plants/acre). Rewet rollers at regular intervals.

Carpet Roller — Use Recommendations

Pest	Amount of GRAZON PC (Picloram) to Use	Specific Directions
Mesquite regrowth	1 gallon (2 lb ae) alone or with 2 quarts RECLAIM to make 8 gallons spray mixture	Include 1 ounce of a recommended agricultural surfactant per gallon of herbicide-water mixture (0.75% vol/vol). Apply from May through August, but preferably in May and June, when moisture availability is sufficient to allow normal plant growth. See "Broadcast Application" section for more details regarding optimum conditions for mesquite control.
Huisache/Blackbrush	1 gallon (2 lb ae) alone or with 2 to 3 quarts of RECLAIM to make 8 gallons of spray mixture	Include 1 ounce of a recommended agricultural surfactant per gallon of herbicide-water mixture (0.75% vol/vol). Apply in the fall.

Mixing Instructions

Ground and Aerial Applications - For Use With Water Alone: Start with about half the required amount of water in the spray tank. With agitation operating, add the required amount of GRAZON PC and RECLAIM or 2,4-D Amine Herbicides. Then add the required amount of GRAZON ET, or a 2,4-D ester product. If a surfactant is needed, it should be added as the remainder of the required water is added to complete the spray mix. When using a drift control additive such as Naico-Trol or equivalent, follow the manufacturer's directions carefully. Complete dispersion of the additive, such as obtained by passage through a pump with moderate to high shearing action, is essential for proper performance of the product.

Ground Application - For Use With Water and Oil: Add oil to the total spray mix at the ratio of 1 part oil to 5 parts water (5% to 10% of the total mix) using agricultural spray emulsifiers and mixing procedures given below for aerial application. Do not use more than 1 gallon of oil per acre.

Aerial Application - For Use With Water and Oil (Batch Mixing): With continuous, vigorous agitation:

1. Add half the amount of water to be used to the spray tank.
2. Add the required amount of water soluble herbicide such as GRAZON PC, RECLAIM or 2,4-D Amine products required.
3. With continued, vigorous agitation slowly add a premix of oil, emulsifier and oil soluble herbicides such as GRAZON ET or a 2,4-D ester product as required.
NOTE: Do not allow water or mixtures containing water to get into the premix or GRAZON ET Herbicide since a thick "invert" (water in oil) emulsion may be formed that will be difficult to break. Such an emulsion may also be formed if the premix or GRAZON ET is put into the mixing tank before the addition of water.
4. Add the remaining water. Also, during the final filling of the tank, add Naico-Trol or equivalent drift control agent, plus an agricultural surfactant (if a water dilution rather than an oil-water emulsion spray is used).

Aerial Application - For Use With Water and Oil (Meter Mixing): Water-oil sprays containing tank mixes of GRAZON PC Herbicide plus GRAZON ET, or other herbicides may also be prepared using the spray tank "loading" pump to mix the ingredients while filling the tank. This procedure involves simultaneous metering of the required amounts of water and GRAZON PC Herbicide with an oil-emulsifier and 2,4-D or GRAZON ET into the intake line of the pump during operation. Since emulsification is accomplished in the pump, it is important that a pump with moderate to high shearing action be used. For proper results, always introduce the water and GRAZON PC and RECLAIM Herbicide into the intake line before introducing the oil-emulsifier premix, or a thick, invert emulsion may result. Maintain vigorous agitation in the spray tank during application.

Use Of Grazon PC Herbicide And 2,4-D Herbicide With Liquid Fertilizer For Broadleaf Weed Control In Rangeland And Permanent Grass Pasture

GRAZON PC Herbicide mixed with 2,4-D ester or amine (at recommended label rates) may be tank mixed with liquid fertilizers and used in foliar application for weed control and fertilization of rangelands and permanent grass pastures. Use liquid fertilizers at rates recommended by supplier or local Extension Service Specialist.

Begin with a compatibility test by pouring the spray component in the desired order and proportions into a clear glass jar before mixing in the spray tank. Use of a compatibility aid such as Unite or Complex is recommended to help obtain and maintain a uniform spray solution during mixing and application. Compatibility is best with straight liquid nitrogen fertilizer solutions. Mixing with N-P-K fertilizer solutions or suspensions is more difficult and should not be attempted without first conducting a successful jar test. Agitation in the spray tank must be vigorous to compare with jar test agitation.

Suggested Mixing and Application Procedure: With continuous vigorous agitation:

1. Add half the amount of liquid fertilizer to the spray tank.
2. Add compatibility aid such as Unite or Complex at 1 quart per 100 gallons of total spray mix.
3. First add the amount of GRAZON PC needed for the total spray mixture. Then add the amount of 2,4-D needed for the total spray mixture. Mixing with N-P-K fertilizer solutions may be improved following the above procedure by premixing the herbicides with water before adding them to the spray tank. For GRAZON PC, premix 1 part herbicide with 25 to 30 parts water. For 2,4-D, premix 1 part herbicide with 4 parts water.
4. Add the remaining liquid fertilizer to produce the needed total spray volume.
5. Apply as soon as the spray is totally mixed, maintaining continuous, vigorous agitation from start of mixing through application without interruptions.

Application during very cold (near freezing) weather is not advisable.

Do not store the spray mixture.

NOTE: Do not use spray equipment for other applications to land planted, or to be planted, to susceptible crops or desirable sensitive plants, unless it has been determined that all phytotoxic herbicide residue has been removed by thorough cleaning of equipment.

TABLE 1:

AMOUNTS OF GRAZON PC HERBICIDE TO MAKE 100 GALLONS OF SPRAY SOLUTION (OIL-WATER MIXTURE)

LABEL RECOMMENDATIONS		AMOUNT TO MAKE 100 GALLONS OF SPRAY SOLUTION				
TOTAL SPRAY VOLUME GAL/A	RATE PINT/A GRAZON PC	GALLONS			OUNCES	
		GRAZON PC	OIL [®]	WATER	EMULSIFIER [™]	N.T. [®]
2	1	6.2	15.6	78.2	45.3	4.5
2	2	12.5	14.6	72.9	40.5	4.1
4	1	3.1	16.2	80.7	46.8	4.8
4	2	6.2	15.6	78.2	43.8	4.5
10	1	1.3	10.0	88.8	30.0	5.3
10	2	2.6	10.0	87.4	30.0	5.2
20	1	0.7	5.0	94.4	15.0	5.7
20	2	1.3	5.0	93.8	15.0	5.6

- (1) Emulsifiers such as SPONTO 712 or TRITON X-100 should be added at the rate of 3 ounces per gallon of oil in the total spray mix when using a water-soluble formulation.
- (2) Amounts of Nalco-Trol (N.T.) are calculated on the basis of 6 oz of N.T. per 100 gallons of water. Equivalent additives should be added at equivalent rate of active ingredient.
- (3) Do not use more than 1 gallon of oil per acre.

TABLE 2:

AMOUNTS OF GRAZON PC HERBICIDE PLUS GRAZON ET HERBICIDE TO MAKE 100 GALLONS OF SPRAY SOLUTION

LABEL RECOMMENDATIONS			AMOUNT TO MAKE 100 GALLONS OF SPRAY SOLUTION					
TOTAL SPRAY VOLUME GAL/A	RATE PINT/A		GALLONS			OUNCES		
	PC	GRAZON ET	GRAZON PC	GRAZON ET	OIL [®]	WATER	EMULSIFIER [™]	N.T. [®]
2	1	0.5	6.2	3.1	15.1	75.6	15.1	4.5
2	2	0.5	12.5	3.1	14.0	70.4	14.0	4.2
2	1	1	6.2	6.2	14.6	73.0	14.6	4.4
2	2	1	12.5	6.2	13.6	67.7	13.6	4.1
2	1	2	6.2	12.5	13.6	67.7	13.6	4.1
2	2	2	12.5	12.5	12.5	62.5	12.5	3.8
4	1	0.5	3.1	1.6	15.9	79.4	15.9	4.8
4	2	0.5	6.2	1.6	15.4	76.8	15.4	4.6
4	1	1	3.1	3.1	15.6	78.1	15.6	4.7
4	2	1	6.2	3.1	15.1	75.6	15.1	4.5
4	1	2	3.1	6.2	15.1	75.6	15.1	4.5
4	2	2	6.2	6.2	14.6	73.0	14.6	4.4
10	1	0.5	1.2	0.6	10.0	88.2	30.0	5.3
10	2	0.5	2.6	0.6	10.0	86.8	30.0	5.2
10	1	1	1.2	1.2	10.0	87.6	30.0	5.3
10	2	1	2.6	1.2	10.0	86.2	30.0	5.2
10	1	2	1.2	2.6	10.0	86.2	30.0	5.2
10	2	2	2.6	2.6	10.0	84.8	30.0	5.1
20	1	0.5	0.6	0.3	5.0	94.1	15.0	5.7
20	2	0.5	1.2	0.3	5.0	93.5	15.0	5.6
20	1	1	0.6	0.6	5.0	93.8	15.0	5.6
20	2	1	1.2	0.6	5.0	93.2	15.0	5.6
20	1	2	0.6	1.2	5.0	93.2	15.0	5.6
20	2	2	1.2	1.2	5.0	92.6	15.0	5.6

- (1) Emulsifiers such as SPONTO 712 or TRITON X-100 should be added at the rate of 1 ounce per gallon of oil in the total spray mix.
- (2) Amounts of Nalco-Trol (N.T.) are calculated on the basis of 6 oz of N.T. per 100 gallons of water. Equivalent additives should be added at equivalent rate of active ingredient.
- (3) Do not use more than 1 gallon of oil per acre.

TABLE 3:

AMOUNT OF GRAZON PC HERBICIDE PLUS 2,4-D TO MAKE 100 GALLONS OF SPRAY SOLUTION (OIL-WATER MIXTURE)

LABEL RECOMMENDATIONS			AMOUNT TO MAKE 100 GALLONS OF SPRAY SOLUTION						
TOTAL SPRAY VOLUME GAL/A	RATE PINT/A GRAZON PC	FORMULA 40 OR ESTERON 99 CONC.	GALLONS				OUNCES		
			GRAZON PC	FORMULA 40 OR ESTERON 99 CONC.	OIL ⁽¹⁾	WATER	EMULSIFIER ⁽²⁾ 1	3	N.T. ⁽³⁾
2	0.25	0.5	1.6	3.1	15.9	79.4	15.9	47.7	4.8
2	0.5	1	3.1	6.2	15.1	75.5	15.1	45.3	4.5
2	1	2	6.2	12.5	13.5	67.7	13.5	40.5	4.1
2	2	4	12.5	25.0	10.4	52.1	10.4	31.2	3.1
4	0.25	0.5	0.8	1.6	16.2	81.4	16.2	46.8	4.9
4	0.5	1	1.6	3.1	15.9	79.4	15.9	47.7	4.8
4	1	2	3.1	6.2	15.1	75.5	15.1	46.8	4.5
4	2	4	6.2	12.5	13.5	67.7	13.5	40.5	4.1
10	0.25	0.5	0.3	0.6	10.0	89.1	10.0	30.0	5.4
10	0.5	1	0.6	1.2	10.0	88.2	10.0	30.0	5.3
10	1	2	1.2	2.4	10.0	86.4	10.0	30.0	5.2
10	2	4	2.4	4.8	10.0	82.8	10.0	30.0	5.0
20	0.25	0.5	0.15	0.3	5.0	94.6	5.0	15.0	5.7
20	0.5	1	0.3	0.6	5.0	94.1	5.0	15.0	5.7
20	1	2	0.6	1.2	5.0	94.2	5.0	15.0	5.7
20	2	4	1.2	2.4	5.0	91.4	5.0	15.0	5.5

(1) Emulsifiers such as SPONTO 712 or TRITON X-100 should be added at the rate of 3 ounces per gallon of oil when used with a water-soluble product such as 2,4-D Amine or at 1 ounce per gallon of oil when used with an oil-soluble product, such as 2,4-D Ester, in the total spray mix.

(2) Amounts of Naico-Trol (N.T.) are calculated on the basis of 6 oz. of N.T. per 100 gallons of water. Equivalent additives should be added at equivalent rates of active ingredient.

(3) Do not use more than 1 gallon of oil per acre.

TABLE 4:

AMOUNTS OF GRAZON PC HERBICIDE AND RECLAIM HERBICIDE TO MAKE 100 GALLONS OF SPRAY SOLUTION (OIL-WATER EMULSION)

LABEL RECOMMENDATIONS			AMOUNT TO MAKE 100 GALLONS OF SPRAY SOLUTION						
TOTAL SPRAY VOLUME GAL/A	RATE PINTS/A GRAZON PC	RECLAIM	GALLONS				OUNCES		
			GRAZON PC	RECLAIM	OIL ⁽¹⁾	WATER	EMULSIFIER ⁽²⁾	N.T. ⁽³⁾	
2	1	3/8	6.2	4.2	14.9	74.7	44.7	4.5	
2	1	1/2	6.2	8.3	14.3	71.2	42.9	4.3	
2	2	3/8	12.5	4.2	13.9	69.4	41.7	4.2	
2	2	1/2	12.5	8.3	13.2	66.0	39.6	4.0	
4	1	3/8	3.1	2.1	15.6	79.0	47.4	4.7	
4	1	1/2	3.1	4.2	15.5	77.2	46.5	4.6	
4	2	3/8	6.2	2.1	15.3	76.4	45.9	4.6	
4	2	1/2	6.2	4.2	14.9	74.7	44.7	4.5	
10	1	3/8	1.2	0.8	10.0	87.8	30.0	5.3	
10	1	1/2	1.2	1.7	10.0	86.9	30.0	5.2	
10	2	3/8	2.6	0.8	10.0	86.4	30.0	5.2	
10	2	1/2	2.6	1.7	10.0	85.5	30.0	5.0	
20	1	3/8	0.6	0.4	5.0	94.0	15.0	5.6	
20	1	1/2	0.6	0.8	5.0	93.6	15.0	5.6	
20	2	3/8	1.2	0.4	5.0	93.4	15.0	5.6	
20	2	1/2	1.2	0.8	5.0	93.0	15.0	5.6	

(1) Do not use more than a gallon of oil per acre.

(2) Emulsifiers such as SPONTO 712 or TRITON X-100 should be added at the rate of 3 ounces per gallon of oil in the spray solution.

(3) Amounts of Naico-Trol (N.T.) are calculated on the basis of 6 oz. of Naico-Trol per 100 gallons of water. Equivalent additives should be added at equivalent rates of active ingredient.

**TABLE 2:
MIXING CHART FOR HIGH VOLUME FOLIAR
APPLICATIONS**

VOLUME OF SPRAY SOLUTION DESIRED	AMOUNT OF GRAZON PC REQUIRED		
	1 gallon	2 gallons	4 gallons
400 GAL	1 gallon	2 gallons	4 gallons
100 GAL	1 quart	2 quarts	1 gallon
	LABEL DIRECTION		
50 GAL	1 pint	1 quart	2 quarts
10 GAL	3.2 fl. oz.	6.4 fl. oz.	12.8 fl. oz.
3 GAL	1 fl. oz.	2 fl. oz.	4 fl. oz.

READ AND FOLLOW ALL USE PRECAUTIONS AND STORAGE AND DISPOSAL INSTRUCTIONS GIVEN BELOW

USE PRECAUTIONS

Use this product only as specified on this label. Observe any special use and application restrictions and limitations, including method of application and permissible areas of use as promulgated by state or local authorities. Observe labels of other products used in tank mixtures and follow precautions and recommendations thoroughly.

Do Not Make Application When Circumstances Favor Movement From Treatment Site.

Do Not Contaminate Water Intended for Irrigation or Domestic Purposes. To avoid injury to crops or other desirable plants, do not treat or allow spray drift or run-off to fall onto banks or bottoms of irrigation ditches, either dry or containing water, or other channels that carry water that may be used for irrigation or domestic purposes. Do not apply to snow or frozen ground.

Do not use on sub-irrigated land.

Grazon PC Herbicide should not be applied in residential areas or near ornamental trees and shrubs. Untreated trees can occasionally be affected by root uptake of the herbicide through movement into the top soil or by excretion of the product from the roots of nearby treated trees. Do not apply GRAZON PC within the root zone of desirable trees, unless such injury can be tolerated.

Do Not Apply or Otherwise Permit GRAZON PC or Sprays Containing GRAZON PC to Contact Crops or Other Desirable Broadleaf Plants, including but not limited to alfalfa, beans, cotton, grapes, melons, peas, potatoes, safflower, soybeans, sugar beets, sunflower, tobacco, tomatoes, and other vegetable crops, flowers, fruit plants, ornamentals and shade trees. Do not apply this product in the rooting zone of nearby desirable plants, as injury may occur through root uptake.

Do not use grass or hay from treated areas for composting or mulching of susceptible broadleaf crops.

Avoid Injurious Spray Drift. Applications should be made to avoid spray drift since very small quantities of the spray, which may not be visible, may injure susceptible crops during both growing and dormant periods. To minimize spray drift:

1. Use nozzle pressures no greater than are required to obtain a proper spray pattern for adequate coverage of target plants.
2. Apply as a coarse spray.
3. Use nozzles designed for herbicide application that do not produce a fine droplet spray.
4. Spray when wind velocity is low. Follow local state regulations. Avoid conditions which are conducive to air inversions.

When making applications near susceptible crops, spray drift may be further lessened by using a drift control system such as the Microfoil, Thru-Valve boom (or equivalent) or a drift control agent such as Nalco-Trol (or equivalent). If a drift control additive is used, follow all use recommendations and precautions on the product label.

Ground Equipment: With ground equipment, spray drift can be lessened by keeping the spray boom as low as possible; by keeping the operating spray pressures at the manufacturers recommended minimum pressures for the specific nozzle types used (low pressure nozzles are available from spray equipment manufacturers). Do not apply this product with a mistblower. In hand-gun applications, spray drift may be minimized by selecting the minimum pressure that will provide adequate coverage (without forming a mist); by spraying no higher than brush tops.

Aerial Application: With aircraft, drift can be lessened by using straight stream nozzles directed straight back; by using a spray boom no longer than 3/4 of the rotor or wing span of the aircraft; by using low pressure sprays; by using a drift control system or drift control additive. Do not use a thickening agent with the Microfoil or the Thru-Valve boom, or other drift control systems that cannot accommodate thick sprays.

Determine Air Movement and Directions Before Making Foliar Applications: Do not spray when wind is blowing toward susceptible crops or ornamental plants near enough to be injured. It is suggested that a continuous smoke column at or near the spray site or a smoke generator on the spray equipment be used to detect air movements, lapse conditions, or temperature inversions (stable air). If the smoke layers or otherwise indicates a potential for hazardous spray drift, do not spray.

Do not rotate food or feed crops on treated land if they are not registered for use with picloram until an adequately sensitive bioassay or chemical test shows that no detectable picloram is present in the soil.

Do not spray pastures if injury to existing forage legume component cannot be tolerated. GRAZON PC may injure or kill legume plants. Forage legumes may be less sensitive to the herbicide after the seed has been set and has hardened off. New legume seedings may not be successful if made within one year of application.

Do not move treated soil to other areas or use it to grow plants if they are not registered for use with picloram until an adequate sensitive bioassay or chemical test shows that no detectable picloram is present in the soil.

Do not transfer livestock from treated grazing areas onto broadleaf crop areas without first allowing 7 days of grazing on untreated grass pasture. Otherwise, urine may contain enough picloram to cause injury to sensitive broadleaf plants.

Do not use manure from animals grazing treated areas on land used for growing broadleaf crops, ornamentals, orchards or other susceptible desirable plants. Manure may contain enough picloram to cause injury to susceptible plants.

Spray Equipment — Cleaning Instructions

To avoid injury to desirable plants, equipment used to apply GRAZON PC Herbicide should be thoroughly cleaned before reusing to apply any other chemicals.

1. Rinse and flush application equipment thoroughly after use. At least three times with water, and dispose of rinse water in non-cropland area away from water supplies.
2. During the second rinse, add 1 qt of household ammonia for every 25 gallons of water. Circulate the solution through the entire system so that all internal surfaces are contacted (15-20 min.). Let the solution stand for several hours, preferably overnight.
3. Flush the solution out the spray tank through the boom.
4. Rinse the system twice with clean water, recirculating and draining each time.
5. Nozzles and screens should be removed and cleaned separately.

Do not mix with dry fertilizer.

PRECAUTIONARY STATEMENTS

Environmental Hazards

Picloram is a chemical which can travel (seep or leach) through soil and under certain conditions has the potential to contaminate groundwater which may be used for irrigation and drinking purposes. Users are advised not to apply picloram where soils have a rapid to very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow or to soils containing sinkholes over limestone bedrock, severely fractured surfaces, and substrates which would allow direct introduction into an aquifer. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

An aquifer is defined as "an underground, saturated, permeable, geologic formation capable of producing significant quantities of water to a well or spring. It is the ability of the saturated zone, or portion of that zone, to yield water which makes it an aquifer" (American Chemical Society, 1963).

STORAGE AND DISPOSAL

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

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal (METAL): Do not reuse container. Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Container Disposal (PLASTIC): Do not reuse container. Triple rinse (or equivalent). 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.

WARRANTY LIMITATIONS AND DISCLAIMER

DowElenco warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions therein under normal conditions of use. THIS IS THE ONLY WARRANTY MADE ON THIS PRODUCT. NO OTHER EXPRESS AND NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE OUTSIDE OF THIS LABEL. Therefore, neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), under abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes, etc.) or under conditions not reasonably foreseeable to or beyond the control of seller.

When buyer or user suffers losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability, or other legal theories), buyer or user must promptly notify in writing DowElenco of any claims to be eligible to receive either remedy given below. The EXCLUSIVE REMEDY OF THE BUYER OR USER and the LIMIT OF LIABILITY of DowElenco or any other seller will be one of the following, at the election of DowElenco:

(1) Refund of purchase price paid by buyer or user for product bought, or

(2) Replacement of amount of product used.

The seller will not be liable for consequential or incidental damages or losses.

The terms of this Warranty Limitations And Disclaimer cannot be varied by any written or verbal statements or agreements. Any employee or sales agent of the seller is not authorized to vary or exceed the terms of this Warranty Limitations And Disclaimer in any manner.

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