



DOW 2+2

low-volatile brush and weed herbicide

For the Control of Most Kinds
of Unwanted Trees and Brush, as Well as
Annual and Perennial Broadleaf Weeds on Rangelands,
Fencerows, and Industrial Sites by Aircraft or Ground Spraying

FEB 15 1983
for the Federal Register

464-587

ACTIVE INGREDIENTS:	
2,4-Dichlorophenoxyacetic Acid, Butoxyethyl Ester	33.2%
2,4,5-Trichlorophenoxyacetic Acid, Butoxyethyl Ester	31.4%
INERT INGREDIENTS:	35.4%
Isomer Specific by AOAC Method No. 6.275-6.279 (13th Ed.)	

2,4-D Acid Equivalent 22.9% — 2 pounds per gallon
 2,4,5-T Acid Equivalent 22.6% — 2 pounds per gallon
 EPA Registration No. 464-587 EPA Est. 464-MI-1

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

TRANSLATION: (TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals
HARMFUL IF SWALLOWED
MAY CAUSE IRRITATION
 Read Complete Precautions on Side Panel

3.79 L/1 gal

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals
HARMFUL IF SWALLOWED
MAY CAUSE IRRITATION
 Avoid Contact with Eyes, Skin, and Clothing
 Do Not Take Internally
Environmental Hazards
 This product is toxic to fish. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not contaminate irrigation ditches or water used for irrigation or domestic purposes.
Physical or Chemical Hazards
Do Not Cut or Weld Container

In case of an emergency endangering life or property involving this product, call collect 517-636-4400

AGRICULTURAL CHEMICAL
 Do Not Ship or Store with Food, Feeds, Drugs or Clothing

FOR TREE, BRUSH AND WEED CONTROL
 DOW 2 + 2 Brush Killer is recommended for control of most species of unwanted woody plants, as well as annual and perennial broadleaf weeds growing in rangelands, fencerows and industrial sites. Do not use in forest lands, rights of way, or pastures.

Woody Species Controlled: alder, aspen, bigleaf maple, birch, blackcherry, boxelder, buckbrush, catalpa, chamise, chokecherry, coastal sage, coyotebrush, crabapple, dogwood, elder, elderberry, elm, hawthorn, honey-suckle, kumru, locust, manzanita, oaks, osage, persimmon, poison ivy, pricklypear cactus, sassafras, sumac, sweetgum, sycamore, tulip poplar, wild cherry, wild grape, wild rose, willow and many others.

Weeds Controlled: bitterweed, broomweed, cotton, dandelion, docks, goldenrod, knotweed, locoweed, lupines, marshmallow, musk thistle, plants, ragweeds, velvet, wild carrot and many others.

DIRECTIONS FOR USE
 It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
 For tree sprays should be applied during warm weather and when brush and weeds are actively growing. Application under drought conditions often will give poor results. Use low spray pressure to minimize spray drift. Do not apply DOW 2 + 2 Brush Killer where spray drift may contact nearby susceptible crops or other desirable plants or may contaminate water intended for irrigation or domestic use. Read and follow all Use Precautions given on this label. Do not include a fumigant in sprays unless recommended on this label.

NOTE: If there are uncertainties concerning special local use situations, consult local Extension Service or University Specialists for advice.

PREPARING THE SPRAY

DOW 2 + 2 Brush Killer in water or oil-water sprays forms an emulsion (not a solution) and separation may occur unless the spray mixture is agitated continuously. Mechanical agitation is recommended. When mixed with oil only, a solution is formed, and after complete mixing, further agitation is not needed.

NOTE: Where oils are recommended, use diesel oil. Not for use with kerosene.

OIL SPRAY: Add DOW 2 + 2 Brush Killer to the required amount of oil in the spray tank or mixing tank and mix thoroughly. Do not let any water or oil-water mixture get into the product or mix, as a gel may be formed.

WATER SPRAY: Fill the spray tank about half full with clean water. Then slowly add the DOW 2 + 2 Brush Killer and complete filling the tank with the agitator running. Mix thoroughly and continue agitation while spraying.

OIL-WATER MIXTURE SPRAY: With vigorous agitation, 1 gallon of DOW 2 + 2 Brush Killer will mix with up to 10 gallons of oil in 100 gallons of spray mixture. First, premix the DOW 2 + 2 Brush Killer and oil in a separate container. Do not allow any water or mixtures containing water to get into the DOW 2 + 2 Brush Killer or the premix. Fill the spray tank about half full with water, then slowly add the premix with continuous agitation and complete filling the tank with water. If the premix is put in the tank without any water, if a first water added may form a thick "invert" (water in oil) emulsion which will be hard to break. As an alternate procedure, the oil may be added immediately after the DOW 2 + 2 Brush Killer is mixed in the water, and the spray tank is being filled, but a light vigorous mechanical agitation is required and a poorer emulsion may be formed. The premix method is preferred. With either method, agitation in the spray tank should be continued during spray application.

GROUND APPLICATION DIRECTIONS

Basal Bark Treatment: Brush and small trees can be controlled by spraying the basal 12 to 15 inches of stems and trunks. Use a solution of 4 gallons of DOW 2 + 2 Brush Killer in 100 gallons of oil (1 pint in 3 gallons of oil) and apply the mixture by an backpack or power equipment to thoroughly wet the basal area, including the root collar. Old, rough bark requires more spray volume than young or smooth bark. As only the basal portions of the brush are treated on a spot basis, the total amount of spray applied should not exceed 100 gallons per acre. Use a low pressure coarse spray to avoid spray drift. Apply at any time of year except when water, snow or ice prevents spraying to the ground line.

Powered Knapsack Basal Treatment: Mix 8 to 14 gallons of DOW 2 + 2 Brush Killer in oil to make 100 gallons of spray solution. Spray with a portable knapsack mist blower to cover brush stems. Total coverage of stems and root collars is essential for best results. Treatment should require no more than 30 gallons of spray solution per acre. Run knapsack mist blower at 1.4 to 1.3 throttle for best spray delivery and brush coverage. Use a basal nozzle attachment for maximum effectiveness. Hold sprayer nozzle above horizontal position.

Modified Basal or Dormant Cane Treatment: For mixed brush, use 2 to 2.2 gallons of DOW 2 + 2 Brush Killer in 100 gallons of oil. Apply as a drench to the base of the stems and also spray the lower 3-4 feet of the brush tops to run-off. With root suckering species such as locust, persimmon, sassafras and sumac, also spray the ground area so that fall sprouts that may not be readily visible are treated. Spray at any time of the year but preferably after most of the foliage has fallen, since this is a foliage treatment. Dormant brush of average density at 1.4 to 1.3 feet tall may require 150 to 200 gallons of spray per acre for proper coverage.

Fall Treatment: Use a solution of 3 gallons of DOW 2 + 2 Brush Killer in 100 gallons of oil (1 pint in 4 gallons of oil). For trees usually 5 inches or larger in diameter, make a single hack girdle or full of overlapping axe cuts or notches

completely around the tree as close to the ground as convenient. Spray or pour in as much of the spray mixture as the treated area will hold without run-off.

Stump and Stub Treatment: Use a solution of 4 to 6 gallons of DOW 2 + 2 Brush Killer in 100 gallons of oil (1 to 1 1/2 pints in 3 gallons of oil) mixed thoroughly. At the bark and exposed roots as well as the cut surfaces should be sprayed until run down or run off to the ground line is noticeable. Old or rough bark requires more spray volume than young or smooth bark. Apply at any time of the year except when water, snow or ice prevents spraying to the ground line. For best results treat freshly cut stumps and stubs.

General Weed Control: Use 2 quarts of DOW 2 + 2 Brush Killer per acre in the amount of water needed for uniform coverage to control bitterweed, broomweed, clutch ducks, rocka, turks, or locoweed, lupines, marshelder, musk-thistle and other broad leaf weeds. For best control the weeds should be young and growing actively at the time of application.

Control of Chaparral Species: To control chamise, manzanita, coastal sage, ceanothus, coyote brush, and others, apply 2 to 4 quarts of DOW 2 + 2 Brush Killer in 3 gallons of oil per acre. A gallon of oil per acre may be required for added effectiveness. For best control the brush must be fully leafed out and growing actively when sprayed. Retreatment may be needed in subsequent years.

Spot Treatment for Pinyon Pine Cactus: Use 1 pint of DOW 2 + 2 Brush Killer in 3 gallons of oil spray for 100 pads as well as joints and trunk during the fall season.

For Other Brush and Perennial Weeds: Use 1 pint of DOW 2 + 2 Brush Killer in 4 gallons of oil per acre spray to wet foliage. When treating brush also wet the stems, joints and trunk.

AIR APPLICATION DIRECTIONS

General Weed Control: Use 2 quarts of DOW 2 + 2 Brush Killer per acre in 5-15 gallons of water for aerial application to control bitterweed, broomweed, clutch ducks, rocka, turks, locoweed, lupines, marshelder, musk-thistle and other broad leaf weeds. For best control the weeds should be young and growing actively at the time of spraying.

Control of Chaparral Species: To control chamise, manzanita, coastal sage, ceanothus, coyote brush, and others, apply 3 to 4 quarts of DOW 2 + 2 Brush Killer in 5 to 10 gallons of water per acre. A gallon of oil per acre may be required for added effectiveness. For best control the brush must be fully leafed out and growing actively when sprayed. Retreatment may be needed in subsequent years.

Post and Blackjack Oaks: For soil stands, use 3 quarts of DOW 2 + 2 Brush Killer plus 1 gallon of oil in enough water to make 4 to 6 gallons of spray per acre. Apply when oaks are fully leaved out and soil moisture is adequate for active growth.

Sand Shinnery Oak: Use 1 quart of DOW 2 + 2 Brush Killer plus 1 gallon of oil in enough water to make 4 gallons of spray per acre. Apply when brush is in full foliage and growing actively.

USE PRECAUTIONS

NOTE: Do not graze dairy animals on treated areas within six weeks after application. Do not graze meat animals on treated areas within two weeks of spraying.

Do not apply when weather conditions favor drift from areas treated. Do not apply DOW 2 + 2 Brush Killer directly to, or otherwise permit to come into contact with cotton, grapes, fruit or ornamental trees, vegetables, flowers or other desirable crop or ornamental plants which are sensitive to 2,4-D or 2,4,5-T herbicides, and do not permit spray mist to drift onto such plants since even minute quantities of the spray which may not be visible can cause severe injury during both growing and dormant seasons. Use coarse spray to minimize drift.

Application by aircraft, ground rig or hand dispenser should be carried out only when there is no hazard from spray drift. Do not spray when the wind is blowing toward susceptible crops or ornamental plants. Do not spray when wind exceeds 5 miles per hour. Do not apply in the vicinity of susceptible crops or ornamental plants. Do not use in or near a greenhouse.

With aircraft application, drift can be reduced by applying no less than 5 gallons of spray per acre, by using no more than 20 pounds spray pressure at the nozzle, by using nozzles which produce a coarse spray pattern, and by spraying only when the wind velocity is less than 5 miles per hour. With ground equipment, drift can be reduced by keeping the spray boom as low as possible, by applying no less than 20 gallons of spray per acre, by using no more than 20 pounds spraying pressure with flat fan or flooding flat fan nozzle tips, by spraying only when wind velocity is less than 5 miles per hour. In gun application, use gun pressure no higher than 80 psi and apply in such manner as to confine the spray to the target area.

At high temperatures (above 95°F) vapors from this product may injure susceptible plants growing nearby. Excessive amounts of this herbicide in the soil may temporarily inhibit seed germination and plant growth.

Do not use or store around the home, recreation areas or similar sites. To avoid injury to desirable plants, do not handle or apply other agricultural chemicals with the same equipment used for DOW 2 + 2 Brush Killer except as specified on the label.

STORAGE AND DISPOSAL

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

STORAGE: Do not store near fertilizers, seeds, insecticides or fungicides. This product can be stored in an unheated building but if exposed to subfreezing temperatures, should be warmed to at least 40°F and mixed thoroughly before using.

PESTICIDE DISPOSAL: Pesticide, spray mixture, or rinse water that cannot be used according to label instructions must be disposed of according to Federal or approved state procedures under Subtitle C of the Resource Conservation and Recovery Act.

CONTAINER DISPOSAL: Triple rinse (or equivalent), then offer for recycling or reconditioning, or dispose of in a sanitary landfill, or by incineration if allowed by state and local authorities.

Local conditions may affect the use of herbicides. Consult your State Agricultural Experiment Station or Extension Service weed specialists for advice in selecting treatments from this label to best fit local conditions. Be sure that use of this product conforms to all applicable regulations. Apply this product only as specified on this label.

NOTICE: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, expressed or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

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THE DOW CHEMICAL COMPANY

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