

# Types of Herbicides Used in Vietnam and Manufacturers

Name [N]: Afalon CLASS/LABEL [C/L]: HERB (CAUTION)  
CHEMICAL NAME [CN]: 50% N-(3,4 dichlorophenyl)-N-methoxy mentheusea.  
USED FOR [UF]: Selective weed control  
MANUFACTURER [MFG]:  
USED BETWEEN [UB]: 1967 Australian tests  
AMOUNT USED [AU]: Under 5 gals

N: AGENT BLUE  
C/L: HERB (CAUTION)  
CN: Hydroxydimethylarsin Oxide (cacodylate adic)  
UF: Rice crop destruction and to kill grass and bamboo  
MFG: Ansul Company  
UB: 64-71  
AU: 2,166,656 gals

N: AGENT GREEN  
C/L: HERB (WARNING)  
CN: n-butyl ester of 2,4,5-T  
UF: Defoliation of jungle cover  
MFG: Bayer A G, Dow Chem, Union Carbide  
UB: 62-64  
AU: 8,208 gals

N: Agent Orange  
C/L: HERBICIDE (Caution)  
CN: A 50/50 mixture of n-butyl ester of 2,4,-dichlorophenoxy acetic acid  
and 2,4,5,-Trichlorophenoxy Acetic acid  
UF: Defoliation of jungle cover  
MFG: Hercules Inc, Dow Chem, Diamond Shamrock, TH Agriculture & Nutrition  
Co, Thompson Chem Corp. Mansanto Co, Uniroyal Inc  
UB: 1964 and 4-70  
ANT USED: 10,316,929 gals

N: Agent Orange II  
C/L: Herb (Caution)  
CN: A 50/50 mixture of n-butyl esters of 2,4-dichlorophenoxy acetic acid  
and isocytl ester of 2,4,5-T  
UF: Defoliation of jungle cover  
MFG: Miller Chem & Fertilzer, Union Carbide, Vertac, Dow Chemical,  
Diamond  
Shamrock, ICIANZ  
UB: 68-69  
AU: 950,000 gals

N: Agent Pink  
C/L: Herb (Caution)  
CN: 2,4,5-Trichlorophenoxy acetic acid  
UF: Defoliation of jungle cover  
MFG: Dow Chem, Union Carbide  
UB: 62-64  
AU: 122,800 gal

N: Agent Purple  
C/L: Herb (Caution)  
CN: A 50/30/20 mixture of n-butyl ester of 2,4-D, n-butyl, N-butyl 2,4,5-T,  
and Iso-butyl 2,4,5-T  
UF: Forest defoliation  
UB: 1962-64  
MFG: Union Carb, Diamond Shamrock, Dow Chem  
AU: 145,000 gal

N: Agent White

C/L: Herb (Caution)

CN: a 20/80 mixture of the triisopropanolimine salts of picloram and 2,4-D acid

UF: Forest defoliation

MFG: Dow Chem, Union Carbide

UB: 66-71

AU: 5,264,129 gal

N: Agral

C/L: Wetting agent (None)

CN: Nonylophenolethylene oxide condensate

UF: A wetting and spreading agent for herb's

MFG: ICI Plant Protection Div

UB: 67

AU: 12,500 gal

N: Aldrin

C/L: Insecticide (Warning)

CN: 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a,-hexahydroexo 1-4-endo-5,8,-dimethanonaphthalene not less than 95%

UF: primarily to control insects

MFG: Shell Chem

UB: 72-73

AU: 15,400 pounds [lbs]

N: Axodrin - 5

C/L: Insect (Danger, poison)

CN: Dimethyl phosphate of 3-hydroxy-N-methyl-cis-crotonamide, or 0,0-dimethyl-0-(2-methylcarbamoyl-1-methyl-vinyl) phosphate, or Phosphoric acid, dimethyl 1-methyl-E-methylamino)-3-oxo-1-propenyl ester

UF: USAID farm program insect used on potatoes, cotton, rice, a very stable toxic material

UF: control of flies, thrips, bollworms, and aphids

MFG: Crystal Chem Inter-America

UB: 72-73

AU: 213,850 lbs

N: Danex

C/L: Herb (Caution)

CN: 20% solution of 2-methoxy 3,6-dichlorobenzoic acid

UF: Nonselective grass and weed killer

MFG: ICIANZ

UB: 67 Australian test

AU: under 5 gal

N: BHC

C/L: Insect (Warning)

CN: 1,2,3,4,5,6-Hexachlorocyclohexane; aka benzene hexachloride

UF: Control of pests in cereals and sugar beets. Production or use of BHC is prohibited in the US by the EPA

MFG: Hooker Chem; Woolfolk Chem

UB: 72-73

AU: 275,575 lbs

N: Bidran

C/L: Insect (Danger/Poison)

CN: Phosphoric acid, di-methyl 1-methyl-n, n-(dimethyl-amino)-3-oxo-1-propenyl ester, (E)-isomer-(9CI); or dimethyl phosphate of 3-hydroxy-N-N-dimethyl-cis-crotonamide; or 2-dimethyl cis-2 dimethyl-carbamol-1-methylvinyl phosphate

UF: USAID farm program insect used for the control of pests on cotton and control of ticks

MFG: Shell Chem

UB: 72-73

AU: 84,800 lbs

N: Binotal

C/L: Medication (Prescription)

CN: A headache medication containing 50 mg of amytal (tradename for amobarbital, a sedative and hypnotic) and 70 mg of seconal (tradename for secobarbital, a short acting barbiturate)

UF: A French headache medicine, available without prescription in Vietnam: when

abused, it led to persistent neurological disorders, sudden aggression, personality changes, and disorientation

MFG: A French product

UB: 62 and 75

AU: unk

N: Borate Chlorate

C/L: Herb (Warning/Danger)

CN: Sodium tetraborate dehydrate and Na Cl O<sub>2</sub>

UF: A non-selective herb and soil sterilant

MFG: Kerr-McGee Chem Corp (Australian)

UB: 67

AU: 4,500 lbs (estimated)

N: Bromacil

C/L: Herb (Caution/Warning)

CN: 5-Bromo-3-sec-butyl-6-methyuracil

UF: weed and brush killer

MFG: Hopkins Agriculture

UB: 68-69

AU: 16,500 lbs

N: Butoxone 80

C/L: Herb (Caution)

CN: 80% butyl ester of 2,3,5-trichlorophenoxy acetic acid

UF: Defoliant

MFG: ICIANZ

UB: 67 Australian tests

AU: 44,100 lbs

N: Cacodylic Acid (Phytar 138)

C/L: Herb (Caution)

CN: Hydroxydimethylarsin oxide or dimethylarsinic acid

UF: grass, bamboo, and rice crop destruction

MFG: Ansul Co

UB: 62-64

AU: 10,000 lbs

N: Carbaryl (Selvin)

C/L: Insct (Caution/Poison)

CN: 1-Naphthyl N-methylcarbamate

UF: control of insect pests on field crops, trees, poultry and pets

MFG: Union Carbide Agriculture Products Co, Inc

UB: 72-73

AU: 72,750 lbs

N: Chlorfurazole 8

C/L: Herb (Caution)

CN: 20% sodium salt of 4,5-dichloro-2-trifluro-methyl benzimidazole

UF: Herb

MFG: Fisons

UB: 67 Australian tests

AU: under 50 gals

N: Chlordane

C/L: Insct (Warning)

CN: 1,2,4,5,6,7,8,8-Octachlor-2,3a,4,7,7a-hexahydro-4,6-methanoindane

UF: Sprayed for cockroach, termite, tick, and flea control, Banned by the EPA in 75 for all domestic use

MFG: PPG Industries

UB: 62-72

AU: 50,000 gals

N: Cresote (Coal Tar)

C/L: Wood preservative (Caution)

Chem Properties: Relatively insoluble in H<sub>2</sub>O

UF: wood preservative possessng a high toxicity to wood destroying organisms and a low rate of evaporation

MFG: Crowley Tar Products Co; Koopers Co Inc Organic Mat'ls; Los Angeles Chemical Co

UB: 62-71

AU: Unk

N: 2,4, D Acid  
C/L: Herb (Warning)  
CN: 2,4-Dichlorophenoxyaceti acid  
UF: Defoliant; also used in Agents Orange, White, Purple, and as a separate defoliant  
MFG: Miller Chem & Fertilizer; Union Carbide; Vertac; Dow Chem; Diamond Shamrock  
UB: 72-73  
AU: 815,000 lbs

N: 2,4-D Ester  
C/L: Herb (Warning)  
CN: A compound formed by the union of an organic acid and an organic base (an alcohol). An example is 2,4-D & isoocetyl alcohol to form the isoocetyl ester of 2,4-D  
UF: Defoliation of forest canopy  
MFG: Miller Chem & Fertilizer; Union Carbide; Vertac; Dow Chem; Diamond Shamrock; ICIANZ  
UB: 62-70 in AO mixes; 72-73 as a separate herb; 67 Australian tests  
AU: 224,870 lbs (72-73)

N: DDT  
C/L: Insct (Caution)  
CN: Dichloro, Diphenyl, Trichloroethane  
UF: Dusted to control rat fleas in quarters  
MFG: Montrose Chemical; Diamond Shamrock  
UB: 72-73  
AU: 2,253,100 lbs

N: DDVP  
C/L: Insct (Danger/Poison)  
CN: 2,2-Dichlorovinyl dimethyl phosphate  
UF: Dusted to control rat fleas in quarters and pests in stored grain  
MFG: Hopkins Agriculture  
UB: 72-73  
AU: 674,600 lbs

N: Dalapon  
C/L: Herb (Caution)  
CN: 2,2-Dichloropropionic acid  
UF: effective against annual grasses and brushes  
MFG: Dow Chem; Crystal Chem; Bayer  
UB: 72-73; 67 Australian tests  
AU: 121,250 lbs

N: Dapsone  
C/L: Medication  
CN: 4-4' Diraminodipheylsufon  
UF: An experimental anti-malaria drug used in combat areas in 67-69. Dapson is the drug of choice for treatment of Hansens disease (Leprosy)  
MFG:  
UB: 67-69  
AU: Unk

N: DEET  
C/L: Insct Repellant (Caution)  
CN: N,N-Diethyl-m-Toluamide  
UF: Insect repellant, personal and clothing  
MFG: Chemical Formulators; Hercules  
UB: 62-73  
AU: Unk

N: Del Defoliant 21  
C/L: Herb  
CN:  
UF: A defoliant preparation intended for causing leaves to drop from crop plants such as cotton, soybeans or tomatoes, usually to facilitate harvest. Used as a fire base defoliant  
MFG: Australian  
UB: 67-69  
AU: over 44,100 lbs

N: Diazinoh

C/L: Insct (Caution)

CN: O,O-Diethyl O (2-isopropyl-4-methyl-6-pyrimidinyl) phosphorothioate

UF: Principality used for control of soil insects, also in rice pesticide control

MFG: Ciba-Geigy Corp Agricultural Div

UB: 72-73

AU: 1,016,320 lbs

N: Dibrom

C/L: Insct (Danger)

CN: 1,2-Dibromo-2,2-Dichloroethyl dimethyl phosphate

UF: Araricide insct used on numerous crops, flies, and in food processing plants

MFG: Chevron Chem Co; Ortho Agricultural

UB: 72-73

AU: 520,285

N: Dieldrin

C/L: Insct (Warning)

CN: Hexachloro-epoxy-octahydroendo,exo-dimethanonaphthalene (principal constituent, known as HEOD), with not over 15% related compounds

UF: Insect control around quarters

MFG: Shell Internat'l

UB: 64-71

AU: 11,025 lbs

N: Diquat

C/L: Herb (Warning)

CN: 1,1'-2,2'-Bipyridylium ion: or 6, 7-dihydrodipyridol (1,2-a:2,'1'-c) pyrazdiumion present in formulation as the dibromide monohydrate salt

UF: Defoliant - aquatic weed control

MFG: ICI Plant Protection Div

UB: 67-70; 67 Australian tests

AU: 40,000 lbs

N: Diuron

C/L: Herb (Caution)

CN: 3-(3,4-Dichlorophenyl)-1,1-dimethylurea

UF: selective broadleaf herb and soil sterilant

MFG: Hopkins Agriculture

UB: 64

AU: under 5 gals

N: EPN

C/L: Insct (Danger)

CN: O-Ethyl O(4-nitrophenyl) phenylphosphonothioate on ethyl p-nitrophenyl phosphonothioate

UF: insect control such as rice stem borer and boll weevil

MFG: EI duPont de Nemours & Co Inc

UB: 72-73

AU: 26,450 lbs

N: Endrin

C/L: Insct (Danger)

CN: Hexachloroepoxyoctahydroendo,endo-dimethanonaphthalene (principal constituent)

UF: Insect control on cotton and small grains

MFG: Velsicol Chem Corp

UB: 72-73

AU: 451,940 lbs

N: Furadan

C/L: Insct (Warning/Danger)

CN: 2,3-Dihydro-2,2-dimethyl-7-benzofuranyl methylcarbamate

UF: insect control in living quarters

MFG: Pillar Internat'l; FMC agricultural Chem Group

UB: 73

AU: 103,620 lbs

N: Gardona

C/L: Insct (Caution)

CN: (Z) isomer of the compound 2-chloro-1-(2,4,5 trichlorophenyl) vinyl dimethyl phosphate

UF: major pests on cotton, corn, and stored grain  
MFG: Shell Internat'l Chem Co  
UB: 72-73  
AU: 26,450 lbs

N: Lindane  
C/L: Insct (Warning)  
CN: Gamma isomer of 1,2,3,4,5,6-hexachlorocyclohexane  
UF: a powder used in living quarters for roaches and around rat burrows for fleas  
MFG: Celamerck Gmbh & Co KG  
UB: 72-73  
AU: 46,300 lbs

N: Malathion  
C/L: Insct (Caution)  
CN: O,O-dimethyl phosphorodithioate of diethylmercapto succinate or diethylmercaptosucci, S-ester with O,O-dimethyl phosphorodithioate  
UF: roach and pest control in living quarters  
MFG: American Cyanamid Co  
UB: 72-73  
AU: 1,380,080 lbs

N: Maneb  
C/L: Fungicide (Caution)  
CN: Manganese ethylenebisdithiocar  
UF: Blight on tomatoes and potatoes  
MFG: Crystal Chem Inter-American; Cumberland Internat'l Co  
UB: 72-73  
AU: 485,000 lbs

N: Methyl Parathion  
C/L: Insct (Danger)  
CN: O,O-dimethyl-O-p-nitrophenyl phosphorothioate  
UF: broad use insect control  
MFG: Kerr McGee Chem  
UB: 72-73  
AU: 343,920 lbs

N: Mirex  
C/L: Insct (Warning)  
CN: Dodecachlorooctahydr-1,3,4-metheno-2 N-cyclobuta (cd) pentalene  
UF: General purpose insct  
MFG: Allied Chem Corp  
UB:  
AU:

N: Nonuron  
C/L: Herb (Caution)  
CN: 3-(p-chlorophenyl)-1,1-dimethylurea  
UF: Soil Sterilant  
MFG: Hopkins Agricultural chem Co  
UB:  
AU:

N: Paraquat  
C/L: Herb (Danger/Poison)  
CN: 1,1-dimethyl-4-4'-bipyridinium ion; present as the dichloride salt (ICI/Chevron) or dimethyl sulfate salt  
UF: Contract herb and dessicant (Extremely toxic)  
MFG: Ortho  
UB: 67  
AU: 330 lbs

N: Phosphamidon  
C/L: Insct(Poison)  
CN: O,O-dimethyl O-(2-chloro-2-diethylcarbamoyl-1-methyl-vinyl) phosphate  
UF: Insect control in quarters, stores, etc  
MFG: Chevron Chem Co; Ortho Agricultural Chems Div  
UB: 72-73  
AU: 41,900 lbs

N: Phosvel

C/L: Insct (Warning)

CN: O-(4-Bromo-2,5-dichlorophenyl) O-methylphenylphosphonothioate

UF: Insect control in grain storage and warehouses

MFG: Velsicol Chem Corp

UB: 72-73

AU: 41,900 lbs

N: Icloram

C/L: Herb (Caution/Warning)

CN: 4-amino-3,5,6-trichloropicolinic acid

UF: Herb against a wide variety of deep rooted herbaceous weeds and woody plants, also used in Agent White

MFG: Dow Chem Co

UB: 66-71

AU: 5,274,129 gals (2,650 lbs in 68)

N: Polybor Chlorate

C/L: Herb (Caution)

CN: 73% disodium octaborate tetrahydrate and 25% sodium chlorate

UF: Non-selective weed and grass killer

MFG: US Borax

UB: 66-67

AU: 68,500 lbs

N: Primatol A

C/L: Herb (Caution)

CN: 2-chloro-4-ethylamino-6 isopropylamino-1,3,5-triazine

UF: Selective herb

MFG: Geigy

UB: 67 Australian tests

AU: under 5 gals

N: Pyrethrins

C/L: Insct (Caution)

CN: a botanical insecticide with active principles of pyrethrins, cinerins, and jasmolins I and II

UF: Stock, sprays, pet sprays, and food warehouses

MFG: Fairfield American Corp, McLaughlin Gormley King Co; Printiss Drug & Chem Co

UB:

AU:

N: Tandex

C/L: Herb (Caution)

CN: m-(3,3-dimethylureido) phenyl-tert-butylcarbamate

UF: Broad spectrum defoliant for weeds and brush

MFG: FMC Corp

UB:

AU:

N: Trinoxol

C/L: Herb (Caution)

CN: 2,4,5-Trichlorophenoxy acetic acid, and 49% butoxy ethanol ester of 2,4,5-T

UF: Selective herb for brush control

MFG: Union Carbide

UB:

AU:

N: Urox 22

C/L: Herb (Caution/Warning)

CN: 3-(p-chlorophenyl)-1,1-dimethylurea-trichlor

UF: soil sterilant - long lasting

MFG: Hopkins Agricultural Chem Co

UB:

AU:

N: Weedazole

C/L: Herb (Caution)

CN: 3-Amino-1,2,4-triazole

UF: control of annual grasses and broadleaf leaves

MFG: Geigy

UB: 67 Australian tests

AU: under 5 gals

N: Zinc Phosphide

C/L: Rodenticide (Danger/Warning)

CN: Zn3 P2

UF: Mice, rat, rodent control

MFG: Hopkins; Bell Laboratories Inc

UB: 72-73

AU: 99,200

N: Zineb

C/L: Fungicide (Caution)

CN: Zinc ethylenebisdithiocar

UF: control of mites on citrus

MFG: Bayer AG; Farmoplant SPA; FMC Corp Agricultural Chem Group

UB: 72-73

AU: 257,940 lbs



