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The use of pesticides in tobacco-growing

**Assessment of the situation based on
independent publicly available information**

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Coordinator

Carlo Sacchetto

UNITAB
European association of tobacco growers
19, rue Ballu
75009 Paris - France

FETRATAB
European federation of tobacco processors
c/o APTI - Via Cadorna, 29
00187 Rome - Italy

Abstract

Tobacco is often accused of using more pesticides than other crops. The examination of surveys published by the US Department of Agriculture show that pesticide use on tobacco is much lower than on other major crops such as apples, citrus, strawberries, potatoes, carrots or onions.

The evaluation of the use rates on the labels of pesticides publicly available in a number of countries (chosen for the facility of reading the language) shows that the rate of use of tobacco are in line if not lower than those of many other crops.

Tobacco companies work with tobacco boards, universities and agrochemical producers to train farmers on the safe use of pesticides and to develop information on integrated pest management in order to minimize the amount of pesticides needed.

Background

One of the main charges against tobacco-growing needs high inputs of pesticides.

The Framework Convention on Tobacco Control (FCTC) has set up a Working Group on economically sustainable alternatives to tobacco-growing. The Working Group summarized in such a way the impact of tobacco growing:

“Various occupational risks related to tobacco growing were reviewed, including pesticide intoxication,.... The group acknowledged that tobacco growing causes biodiversity losses, land pollution due to pesticides,”¹

Evidence from official documents

There are not many official comparative studies reporting the amount of plant protection products used on different crops which allow understand whether tobacco uses more agrochemicals than other crops. However some information can be taken from the database of the US Department of Agriculture, which conducted a survey on the use of plant protection products in 1992, 1997 and 2002². It appears clearly that tobacco uses less agrochemicals than other major crops such as strawberries, citrus fruits, apples, potatoes or carrots.

Total pesticide use	1992			1997			2002		
	acres crop	lb	lb/acre	acres crop	lb	lb/acre	acres crop	lb	lb/acre
Apples	497,903	25,153,654	50.519	632,642	24,345,397	38.482	458,227	19,490,672	42.535
Carrots	109,640	6,086,431	55.513	133,337	11,049,047	82.866	111,680	700,897	6.276
Citrus	878,300	36,111,808	41.116	1,343,919	85,851,908	63.882	1,277,214	76,968,901	60.263
Cotton	11,120,700	119,318,325	10.729	13,227,053	75,998,748	5.746	12,400,209	49,252,338	3.972
Maize	91,336,196	239,613,818	2.623	75,522,035	225,439,649	2.985	75,042,567	168,149,418	2.241
Onions	167,076	2,776,046	16.615	163,950	7,214,925	44.007	162,393	6,199,309	38.175
Potatoes	1,326,000	59,607,034	44.953	1,353,108	110,681,406	81.798	1,263,995	105,809,224	83.710
Strawberries	57,778	9,073,965	157.049	52,310	11,819,073	225.943	56,897	10,465,190	183.932
Tobacco	1,054,970	24,400,552	23.129	838,159	26,974,241	32.183	454,913	14,336,648	31.515

¹ FCTC: “Study group on economically sustainable alternatives to tobacco growing (in relation to Articles 17 and 18 of the Convention)”, doc. FCTC/COP/3/11, 4 September 2008, http://apps.who.int/gb/fctc/PDF/cop3/FCTC_COP3_11-en.pdf

² US National Pesticide Use Database 1992, 1997, 2002, http://www.croplifefoundation.org/cpri_npud2002.htm

A similar comparison was carried out in 2007 by the Sugarcane Industry Association of Brazil, which described the amount of pesticides used in terms of active substance per hectare on tobacco as one of the lowest among major crops, certainly much lower than the amounts used on apples, tomatoes, potatoes, oranges, cotton, grapes, garlic, onion, bananas, soybean, peanuts, coffee, sugarcane, wheat, millet, rice.³

Additionally, the amount of pesticides used on tobacco can be easily compared with those used on other crops simply by reading the instructions on the labels of plant protection products. Because plant protection products are generally considered as hazardous chemicals, they are among the most rigorously regulated chemicals in the world. Both the active substance and the formulation(s) are registered by governmental authorities in order to be sold and used in a country. In general the registration of pesticides is the process through which the appointed national authority examines the active substance of a pesticide, the site or crop on which it is to be used, the amount, frequency and timing of its use, and storage and disposal practices. The authority normally evaluates the pesticide to ensure that it will not have unreasonable adverse effects on humans, the environment and non-target species. The decision of the national authorities is based on a long list of studies which are required by law and are submitted by the pesticide manufacturers in order to obtain the registration (i.e. the permission to sell and use the pesticide in the country on given crops). The levels of use for each crop that the national authority approves in each country are listed on the label of the formulated plant protection product that is sold on the market. Therefore one can compare the potential level of allowed use of a plant protection product registered for use on tobacco in comparison with other crops. In many countries, the labels of plant protection products are published in official journals as part of the governmental decree regulating their use⁴.

It is therefore be practical and informative to make a survey of the labels of plant protection products registered for use on tobacco.

Annex 1 shows a sample collection of over 170 labels⁵ of pesticides which can be found on the websites of either the governmental registration authorities or the websites of the agrochemical manufacturers, which are generally accepted as official documents. The selection criteria of the countries included in this collection is that they have science-based registration authorities, and the language of the label can be readily understood. Other labels can be obtained, and registration numbers and the product names allow for additional search on the internet. From the extensive list of the labels provided in Annex 1, one can see that the use rates of the different pesticides registered for use on tobacco are in line, if not lower, than those of other crops.

Best practice

Many countries dispose of governmental bodies, generally called tobacco control boards, which have important duties in training tobacco growers in good agricultural and environmental practices, promote scientific and technologic progress, and also monitor the activities of tobacco growers and tobacco companies. Examples of these activities can be seen in the largest tobacco producing countries such as China⁶, India⁷, the Philippines⁸, Zimbabwe⁹.

³ UNICA (Sugarcane Industry Association, "A relação do sector sucralcooleiro com o meio ambiente", http://www.riosvivos.org.br/downloads/jank_unica.pdf

⁴ "Tobacco growing and the use of crop protection agents – Comparison of use between tobacco and other crops", January 2010

⁵ As publicly available in November 2009

⁶ Chinese Government's Official Web Portal, State Tobacco Monopoly Administration, http://www.gov.cn/english/2005-10/03/content_74295.htm

Like their counterparts in several other agricultural sectors, tobacco farmers and tobacco companies fully understand the benefits of a sustainable approach to managing the pests that affect tobacco by combining biological, cultural, physical and chemical tools in a way that minimizes economic, health and environmental risks. Working under the leadership of the University of Kentucky, several scientists from universities, research centers and tobacco companies have joined forces in an Integrated Pest Management (IPM) task force.¹⁰ The objectives of the task force are

- a) to summarize available IPM strategies relevant for each tobacco pest and disease, and
- b) to produce a document for agronomists & farmers,
 - structured by disease / pest
 - providing a common outline framework based on relevant IPM.

The result of IPM is a reduction of use of plant protection products of chemical origin. The information documents, which will cover all diseases which affect tobacco, are progressively available on internet.¹¹

Several state universities or research centers have specific programmes on plant protection use in tobacco. For instance, just to mention the main tobacco producing countries, the Virginia Polytechnic Institute and State University's extension program for tobacco IPM educates growers and extension agents about current pest management practices including the use of economic thresholds, field scouting, cultural practices, and insecticides for managing the major insect pests of tobacco for optimum profits and minimum impact on the environment.¹² In India, the National Institute of Plant Health Management organizes specific courses on plant protection use for tobacco farmers in cooperation with the Indian Tobacco Board.¹³

As acknowledged by the EU¹⁴, in Europe Good Plant Protection Practices (GPPP) for tobacco existed already in 2002, thanks to the work of the European and Mediterranean Plant Protection Organization (EPPO).¹⁵

Tobacco companies and tobacco organization also actively cooperate with plant protection product manufacturers in order to train farmers in technologies aiming at reducing the use of chemicals in the fields. An example of this in Brazil and Guatemala is taken as a representative case study in a publication by the United Nations Industrial Development Organization (UNIDO) and World Business Council for Sustainable Development (WBCSD)¹⁶.

⁷ Government of India, Ministry of Industry & Commerce, Tobacco Board, <http://tobaccoboard.com/content/view/58/74/lang,english/>

⁸ Republic of Philippines, Department of Agriculture, National Tobacco Administration, http://www.nta.da.gov.ph/publications_manual.html

⁹ Zimbabwe, Tobacco Industry and Marketing Board, http://www.timb.co.zw/phocadownload/userupload/phoca_uploads/Executive%20Summary%201.pdf

¹⁰ University of Kentucky, http://www.uky.edu/Ag/Agronomy/IPM_Taskforce/index.htm

¹¹ University of Kentucky, http://www.uky.edu/Ag/Agronomy/IPM_Taskforce/assets/jan2011_update/Final%20Report%20Jan-18-2011.pdf

¹² University of Virginia, <http://web.ento.vt.edu/ento/personalPage.jsp?uuiid=820904>

¹³ National Institute of Plant Health Management, Ministry of Agriculture, India, <http://niphm.ap.nic.in/WorkHighlights.html>

¹⁴ European Commission « Development of guidance for establishing Integrated Pest Management (IPM) principles, doc. N. 07.0307/2008/504015/ETU/B3, Final Report dated 24.4.2009, http://ec.europa.eu/environment/ppps/pdf/final_report_ipm.pdf

¹⁵ EPPO: "Guidelines on good plant protection practice - Tobacco", PP 2/15(1) English

¹⁶ UNIDO/WBCSD : «Bayer CropScience: Integrated Crop Management Capacity Building Projects – Brazil & Guatemala», published in "Developing Countries and Technology Cooperation – Ten case studies", http://www.wbcd.org/web/publications/technology_cooperation_vol2.pdf

Annex 1

Comparison between the registered use rates of pesticides on tobacco and on all the other registered crops

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
Australia				
Ambush	Permethrin 500 g/l - EC	48193/0503	100-200 mL in 2.5-6 hL, or 10-20 mL/hL until run-off	<ul style="list-style-type: none"> • Citrus (non bearing): 10 mL/hL • Cabbages, cauliflower, Brussels sprouts, broccoli: 10-20 mL/hL until run-off, or 100-200 mL in 6-10 hL of water • Celery: 5 mL/ hL • Field peas: 150-250 mL in 2-5 hL • Green beans: 150-200 mL in 2-5 hL • Green peas: 150-250 mL in 2-5 hL • Lettuce: 10-20 mL/hL • Linseed: 200-300 mL in 0.3-1 hL • Nurseries, flowers and other ornamentals except ferns: 100-200 mL in 10 hL • Potatoes: 150-200 mL in 1-2.5 hL, or 10-20 mL/hL until run-off • Sweet corn: 100-200 mL in 2-4.5 hL or 15-20 mL/hL to run-off • Sugar cane: 100-200 mL in 20-30 L water (aerial spray only) • Tomatoes: 100-200 mL in 5-15 hL water or 15-20 mL/hL until run-off • Wheat, oats and barley: 25-200 mL in 0.3-1 hL
Antracol Fungicide spray	Propineb 700 g/kg	30613/1202	200 g/hL or 2 kg/ha	<ul style="list-style-type: none"> • Celery: 200 g/hL or 2 kg/ha • Citrus: 200 g/hL • Cucurbits: 200 g/hL or 2 kg/ha • Lettuce: 200 g/hL or 2 kg/ha • Onions: 200 g/hL or 2 kg/ha • Potatoes: 200 g/hL or 2 kg/ha • Tomatoes: 200 g/hL or 2 kg/ha • Watermelon, rockmelon: 200 g/hL or 2 kg/ha
Chemag Assassinator 400	Fenamiphos 400 g/L	56946/20/0204	24 L/ha in 1.5-3 hL (band treatment 16 mL/10 m of row)	<ul style="list-style-type: none"> • Aloe vera planting material: 1 L/hL • Aloe vera: 30-60 L/ha • Banana planting material: 100 mL/hL • Bananas: 600 mL/100 m row, or 6 mL/stool or 6 mL/sq m of wetted area • Crucifers: 24 L/ha • Cucurbits, carrots, beetroot, onions, celery, sweet potatoes, lettuce, endive, parsnips: 24 L/ha or 16 mL/10 m of row • Grapevines: 30 L/ha, or trickle irrigation 3 mL/sq m • Mushrooms: 65 mL/20 L water (20 L spray mixture/MT compost, or 55 mL/1 MT compost, or 10 mL/bale of peat weighing 50-60 kg, or 55 mL/1 MT casing • Ornamentals, annual: 24 L/ha, or trickle irrigation 16 ml/10 m of row • Ornamentals, perennial, nursery root stock: 24 L/ha or trickle irrigation 16-32 mL/10 m of row • Bulbs: 24 L/ha or 16 mL/10 m of row • Chrysanthemums: 100 mL/hL or 1 L/ha • Pineapples: pre-plant bed treatment: 250 mL/100 m of bed for a 1 m wide band - Plant crop and ratoon crop foliar sprays: 6 L/ha - Ratoon crop foliar sprays only: 12 L/ha

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Potatoes: 13 L/ha (rows 80 cm apart) or 110 mL/100 m of row • Strawberries: 24 L/ha or 16 mL/10 m of row, or trickle irrigation 16 mL/10 m of row • Sugar cane: 10 L/ha • Tomatoes: 24 L/ha or 16 mL/10 m of row, or trickle irrigation 16 mL/10 m of row
Agspray Atlapon 2,2-DPA Sytemic herbicide	2,2-DPA sodium salt 740 g/kg	31434/25/1203	2.5-5 kg/ha (general rate); 200-500 g/hL with 10 hL/ha (handgun); 20-50 g/100 sqm (10 L knapsack)	<ul style="list-style-type: none"> • Non crop areas: 5 kg/ha (general rate); 0.5-4 kg/hL with 10 hL/ha (handgun); 50-400 g/100 sqm (10 L knapsack) • Irrigation channels, drains, bore drains: 10-20 kg/ha (general rate); 1-2 kg/hL with 10 hL/ha (handgun); 100-200 g/100 sqm (10 L knapsack) • Pastures: 5-28 kg/ha (general rate); 0.8-1 kg/hL with 10 hL/ha (handgun); 80g/100 sqm (10 L knapsack) - Not less than 40 kg/ha/year • Lucerne: 3.5-5 kg/ha (general rate); 300-500 g/hL with 10 hL/ha (handgun); 30-50 g/100 sqm (10 L knapsack) • Orchards, apples and pears: 7.5-10 kg/ha (general rate); 0.75-1 kg/hL with 10 hL/ha (handgun); 75-100 g/100 sqm (10 L knapsack) - Max 10 kg/ha/year • Cherries, peaches, apricots: 6-8 kg/ha (general rate); 0.6-0.8 kg/hL with 10 hL/ha (handgun); 60-80 g/100 sqm (10 L knapsack) - Max 8 kg/ha/year • Black and red currants: 10-15 kg/ha (general rate); 1-1.5 kg/hL with 10 hL/ha (handgun); 100-150 g/100 sqm (10 L knapsack) - Max 15 kg/ha/year • Citrus, at least 4 years old: 2.5-4 kg/ha (general rate); 500 g/hL with 10 hL/ha (handgun); 20-40 g/100 sqm (10 L knapsack) - Max 12 kg/ha/year • Vines, at least 4 years old: 10 kg/ha (general rate); 1 kg/hL with 10 hL/ha (handgun); 100 g/100 sqm (10 L knapsack) - Max 10 kg/ha/year • Cotton, potatoes, sunflower, maize, soybean: 2.5-5 kg/ha (general rate); 200-500 g/hL with 10 hL/ha (handgun); 20-50 g/100 sqm (10 L knapsack) • Bananas: 10-15 kg/ha (general rate); 1-1.5 kg/hL with 10 hL/ha (handgun); 100-150 g/100 sqm (10 L knapsack) - Max 10 kg/ha/year • Tea-trees: 2.5-10 kg/ha (general rate) • Sugar cane: 10 kg/ha (general rate); 1 kg/hL with 10 hL/ha (handgun); 100 g/100 sqm (10 L knapsack)
Bravo	Chlorothalonil 720 g/L	54115/10-1000/0509	Seedbed: 220 mL/hL	<ul style="list-style-type: none"> • Artichokes: 1.8-2.3 L/ha • Bananas: 1.8-3 L/ha • Broccoli, Brussels sprouts, cabbages, cauliflowers: 1.8-3.5 L/ha • Capsicum peppers: 1.8-2.3 L/ha • Carrots: 1.8 L/ha • Celery: 1.2 L/ha • Cucurbits: 1.6-2.5 L/ha • Endive, 1.8-2.3 L/ha • Leeks, shallots : 1.8-2.3 L/ha • Okra : 1.8-2.3 L/ha • Onions: 2.3 L/ha • Potatoes: 1.1-1.8 L/ha • Radish: 1.8-2.3 L/ha • Rhubarb: 140 mL/hL (apply 2,00 L/ha) • Sweet corn: 1.8-2.3 L/ha • Tomatoes: 1.8-2.3 L/ha • Water cress: 1.8-2.3 L/ha

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Broad beans: 1.4-2.3 L/ha • Peanuts: 1.1-1.8 L/ha • Peas: 1.1-1.8 L/ha • Ornamental: 100 mL/hL • Almonds: 150 mL/hL • Apricots, cherries: 150 mL/hL • Grapes: 160-210 mL/hL • Nectarine, peaches, plums: 160 mL/hL
Burgmaster flowable	Carbaryl 500 g/L EW	40146/0603	Tobacco bulk sheds: 200 mL/10 L water. 5 L of spray should cover 100 sq meters	<ul style="list-style-type: none"> • Avocados: 200 mL/hL • Citrus: 100-200 mL/hL • Feijoa, guavas, 200 mL/hL • Fruit, general: 175 mL/hL • Grapes: 160-200 mL/hL • Jaboticaba, jackfruit: 200 mL/hL • Kiwi fruit: 160-200 mL/hL • Loquats: 200 mL/hL • Lychees: 200 mL/hL • Macadamias: 200 L/hL • Mangoes: 140-200 mL/hL • Pecans: 200 mL/hL • Pome fruits: 160-200 mL/hL • Rambutan: 200 mL/hL • Raspberries: 200 mL/hL • Stone fruits: 160-290 mL/hL • Beans: 200 mL/hL • Capsicum: 200 mL/hL • Carrots: 200 mL/hL • Cucurbits: 200 mL/hL • Leafy and root vegetables: 300 mL/hL • Rosella: 200 mL/hL • Sweet corn: 1.6-2 L/ha • Vegetables, general: 160-320 mL/hL • Potatoes, tomatoes: 200 mL/hL or 2.2 L/ha • Cereals, sorghum, sunflower: 160-220 mL/hL or 1.8-2.2 L/ha • Cereals, pastures: 160 mL/hL • Cotton: 200 mL/hL or 2.2 L/ha • Duboisia: 200 mL/hL or 2.2 L/ha • Kenaf: 2.2 L/ha • Linseed: 2.2 L/ha • Lucerne: 0.5-2.2 L/ha • Pastures, pasture seed crops: 200-500 mL/hL, or 1.1-2.2 L/ha • Sorghum: 160-200 mL/hL or 1.8-2.2 L/ha • Sunflower: 1 L/ha • Ornamentals: 150-200 mL/hL or 1.8-2.2 L/ha • Roses: 200 mL/hL • Elm trees in non crop situations: 200 mL/hL • Strawberry, blueberries, cape gooseberries: 200 mL/hL • Non crop, commercial and industrial areas, rights of way: 0.080.16-2.2 L/hL • Industrial and domestic areas: 0.53-2.2 L/hL
Crop Care Captan	Captan 800 g/kg WG	48198/0507	Seedbeds: 125 g/hL (3 L solutions/sq m) - apply ever 7-14 days since plants are 5 cm high	<ul style="list-style-type: none"> • Ornamental seedbeds: 125 g/hL (3 L solutions/sq m) - apply ever 7-14 days • Apples: 125 g/hL, max 5 appl./season • Pears: 125 g/hL, max 5 appl./season • Grapes: 125 g/hL, max 5 appl./season • Stone fruit: 125 g/hL, max 5 appl./season • Strawberries: 125-200 g/hL, max 5 appl./season

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Turf: 100-150 in 25-50 L/100 sq m turf, max 5 appl./season • Roses: 125 g/hL, max 5 appl./season
Command 480 EC	Clomazone 480 g/L - EC	4964/0304	Field: 1-2 L/ha	<ul style="list-style-type: none"> • Cucumber, pumpkin, kabocha, rockmelon, watermelon, zucchini: 0.5-1 L/ha • Green beans: 0.5-1 L/ha • Navy bean: 0.5-1 L/ha • Poppies: 0.25-1 L/ha • Potatoes: 0.5 L/ha
Barmac Copper oxychloride	Copper oxychloride 500 g/kg	41095/0800	Seedbeds: 400 g/hL	<ul style="list-style-type: none"> • Almonds nectarines, peaches: 250 g/hL, or 3 kg/ha • Cherries, apricots: 150-250 g/hL • Apples and pears: 250 g/hL or 3 kg/ha • Avocados: 250 g/hL or 3 kg/ha • Bananas: 250 g/hL or 3 kg/ha • Beans: 250 g/hL or 2.5 kg/ha • Beans, broad beans: 250 g/hL or 2.5 g/ha • Brassicas: 250 g/hL or 2.5 kg/ha • Capsicums: 250 g/hL or 2.5 kg/ha • Carrots: 250 g/hL or 2.5 kg/ha • Celery: 250 g/hL or 2.5 kg/ha • Citrus: 175-300 mL/hL • Cucurbits: 250 g/hL or 2.5 kg/ha • Guavas: 250 g/hL or 3 kg/ha • Lettuce: 250 g/hL or 2.5 kg/ha • Litchi: 400 g/hL or 4 kg/ha • Macadamia: 250 g/hL or 3 kg/ha • Mangoes: 250 g/hL or 3 kg/ha • Onions: 250 g/hL or 2.5 kg/ha • Ornamentals, 300 g/hL, or 3 kg/ha • Passion fruit: 200-400 g/hL, or 2-4 kg/ha • Parsnips: 250 g/hL or 2.5 kg/ha • Peas: 250 g/hL or 2.5 kg/ha • Potatoes: 220-250 g/hL, or 2.5 kg/ha • Red beet: 250 g/hL or 2.5 kg/ha • Rhubarb: 250 g/hL or 2.5 kg/ha • Silver beet, spinach: 250 g/hL or 2.5 kg/ha • Stone fruit: 400-750 g/hL • Apricots: 500 g/hL • Tomatoes: 220-250 g/hL or 2.5 kg/ha • Vines: 250 g/h/hL or 2.5 kg/ha • Walnuts: 300 g/hL or 3 kg/ha
Chemfarm Metham	Metham sodium 510 g/L, soil fumigant	40064/0898	Plant beds: 9.75 L/7-9 hL/100 sqm	<ul style="list-style-type: none"> • Sites for seedbeds, lawns and other limited areas: 25.50 L/50 L water per 1000 sq m • Field application to total area: 250-500 L/4-7 hL/ha soil injection; 600-800 L/9-11 hL/ha (trickle irrigation); 250-500 L/4 hL/ha • Field application to beds or rows: 250-500 L/4-7 hL/ha (soil injection); 400-800 L/7-10 hL/ha (beds, soil covering method); 250-500 L/4-7 hL (rotary tiller); 250-800 L/ha (trickle irrigation)
Chlorpyrifos 500 EC	Chlorpyrifos 500 g/L - EC	32902/1208	3 L/ha	<ul style="list-style-type: none"> • Apples, pears: 100 mL/hL • Avocado: 50-100 mL/hL or 1-2L/ha • Citrus: 50-100 mL/hL • Pome fruit: 50 ml/hL • Grape vine: 50-100 mL/hL • Kiwifruit: 50 mL/hL • Mango: 100 mL/hL • Stone fruit: 2 L/ha or 100 mL/hL • Bananas: 0.2-1.8 L/hL, or 1-2 L/10 L/ha aerial spray • Cabbage, cauliflower: 300 mL/hL (drench) or 2 L/ha

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				(boom spray) <ul style="list-style-type: none"> • Carrots: 500-700 mL/ha • Cassava: 700 mL/ha • Cole crops :0.14-2 L/ha, or 50-200 mL/hL • Ginger: 700-900 mL/ha • Pineapple: 50-100 mL/hL or 5 L/ha • Potatoes: 0.9-6 L/ha • Strawberries: 100 mL/10 kg bran • Silver beet: 140-300 mL/ha • Tomatoes: 0.5-2 L/ha, or 50-300 mL/hL • Vegetables (asparagus, beans, beetroot, broccoli, Brussels sprouts, cabbage, cauliflower, capsicum, carrot, celery, eggplant ,onion, peas, potatoes, radish, rhubarb, shallot, sweet potato, tomato, turnip500-800 mL/ha or 50-70 mL/hL • Cereals: 0.07-1.5 L/ha • Pastures: 0.07-1.5 L/ha • Forage crops: 0.07-1.5 L/ha • Oil seeds: 0.7-1.5 L/ha • Field peas: broad beans, chickpeas, lupins, Lucerne, Lucerne pastures and clover seed crops, rapeseed, canola, linseed, safflower, wheat, oats, barley, rye, triticale, improved annual pastures, established perennial pastures: 140-300 mL/ha • Cotton: 0.3-1.5 L/ha • Hops: 160 mL/hL • Lucerne: 300-900 L/ha • Lucerne and medicain pasture and forage crops: 200-350 mL/ha • Maize, soybeans, sunflower: 100 mL/2.5 kg cracked wheat (bait) • Pastures: 0.7-1.5 L/ha • Pastures, forage crops: 0.7-0.9 L/ha • Rapeseed, canola: 1-1.5 L/ha • Rice: 0.06 – 1.5 L/ha • Sorghum: 0.35-1.5 L/ha • Sugarcane: 0.35-2 L/ha • Turf: 0.9-6 L/ha, or 9-60 mL/100 sq m
Cypershield 200	Cypermethrin: 200 g/L	48451/0700	38-50 mL/hL (spray volume 2-10 hL/ha)	<ul style="list-style-type: none"> • Barley: 170 mL/ha • Cereals: 75 mL/ha • Cotton: 375-625 mL/ha • Soybeans: 380-500 mL/ha • Sweet corn: 380-500 mL/ha • Maize: 300-500 mL/ha • Sorghum: 190-500 mL/ha • Sunflower: 380-500 mL/ha • Tomatoes: 130-400 mL/ha (spray volume1-4 hL/ha) or 18-50 ml/hL (spray volume 2-10 hL/ha) • Cabbage, cauliflowers, Brussels sprouts, broccoli, kale, kohlrabi, Chinese cabbage, turnip: 50 ml/hL (spray volume 6-10 hL/ha) or 400 mL/ha(spray volume 1-6 hL/ha) • Field peas: 200-250 mL/ha • Lupins: 75-300 mL/ha
Decis Option	Deltamethrin 27.5 g/L	51849/1202	40-50 mL/hL in 6-10 hL/ha depending on plant size	<ul style="list-style-type: none"> • Berry vegetables, cape gooseberry and rosella: 50 mL/hL • Canola: 200-500 mL/ha • Cereals: 200-500 mL/ha • Chickpeas, faba beans, lentils, linseed, safflower, vetch: 200-500 mL/ha • Cole crops: 40-50 mL/hL in 6-10 hL/ha, or 400-500

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				mL/ha at low volume of spray <ul style="list-style-type: none"> • Cotton: 180-700 mL/ha • Field peas: 200-500 mL/ha • Lupins: 200-500 mL/ha • Maize and sweet corn: 50-100 mL/hL in 6-10 hL/ha, or 500 mL/ha at low volume of spray • Sorghum: 200-500 mL/ha • Soybean and other seed and pod crops: 500 mL/ha • Sunflower: 500 mL/ha • Tomatoes: 30-50 mL/hL in 6-10 hL/ha, or 300-500 mL/ha at low volume of spray
Dipterex 500 SL	Trichlorfon 500 g/L	33102/1206	95 mL/hL or 1.3 L/ha	<ul style="list-style-type: none"> • Canola: 1.2 L/ha • Cereals: 1-1.7 L/ha • Grass seed crops: 1.2 L/ha • Legumes: 1.2 L/ha • Lupins: 1.2 L/ha • Lucerne: 0.9-1 L/ha • Maize : 1-1.2 L/ha • Pastures : 1.2-1.3 L/ha • Rice 0.6-0.85 L/ha • Safflower : 1-1.1 L/ha • Small grains: 1.2 L/ha • Sorghum: 1.1-1.2 L/ha • Soybean: 1.25 L/ha • Sugarcane: 1.2 L/ha • Sunflower: 1-1.2 L/ha
Dual Gold	S-metholachlor 960 g/L	50477/1003	1.5 L/ha	<ul style="list-style-type: none"> • Broccoli, Brussels sprouts, Cabbages, cauliflowers: 1.5-2 L/ha • Canola: 0.15-0.25 L/ha • Cotton: 1 L/ha • Green beans, navy beans: 1.5-2 L/ha • Maize, sweet corn: 1-2 L/ha • Pastures: 0.2-0.25 L/ha • Peanuts: 1-2 L/ha • Soybeans: 1-2 L/ha • Sunflowers: 1-2 L/ha • Sorghum: 1-2 L/ha • Sugar cane: 1.1-1.8 L/ha • Sweet potatoes: 1.5 L/ha • Barley oats: 0.375-0.5 L/ha • Wheat, barley, oats, triticale: 0.15-0.25 L/ha
Endosulfan 350 EC	Endosulfan 350 g/L - EC	32799/0606	125-250 mL/hL	<ul style="list-style-type: none"> • Canola, Linseed, safflower, sunflower (pre-emergent use only): 0.5-1 L/ha • Cereals (pre-emergent use only): 0.5-1 L/ha • Chickpeas, cowpeas, pigeon peas, adzuki beans, faba beans, peas-field, navy beans, mung beans, lupins, soybeans (pre-emergent use only):0.5-1 L/ha • Cotton: 2.1 L/ha • Cabbages, cauliflower, broccoli: 2.1L/ha or 190 mL/hL • Beetroot: 190-200 mL/hL or 2.1 L/ha • Capsicum, okra, cape gooseberry: 2.1L/ha or 190 mL/hL • Carrots: 190 mL/hL • Celery: 190 mL/hL • Cucurbits: 190-200 mL/hL or 2.1 L/ha • Eggplant: 190-200 mL/hL or 2.1 L/ha • Potatoes: 2.1 L/ha • Sweet potatoes: 2.1 L/ha • Taro: 200 mL/hL

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Tomatoes: 190-200 mL/hL or 2.1 L/ha • Avocados: 150-200 mL/hL • Cashews: 150 mL/hL • Custard apple: 150-200 mL/hL • Citrus including mandarins, lemons, orange and/or grapefruit: 10-30 mL/hL • Guava, persimmons: 150-200 mL/hL • Kiwi: 150-200 mL/hL • Logans: 200 mL/hL • Loquats: 200 mL/hL • Lychees: 150 mL/hL • Macadamias: 150-200 mL/hL • Mammey: 200 mL/hL • Mangoes: 150-200 mL/hL • Passion fruit: 150-200 mL/hL • Pawpaw: 150 mL/hL • Pecan nuts: 2.8 L/ha or 150 mL/hL • Pistachios: 200 mL/hL • Pome fruits: 150-190 mL/hL • Pomegranates : 200 mL/hL • Rambutans : 200 mL/hL • Sapodillas : 200 mL/hL • Tamarillos : 200 mL/hL • Native trees, shrubs: 0.5-1 L/ha • Nursery crops: 190 mL/hL • Ornamentals: 190-200 mL/hL • Wildflowers and proteas: 200 mL/hL
Hi-mal	Maldison 1150 g/L	48992/0207	45 mL/hL	<ul style="list-style-type: none"> • Bowling and golf greens: 55 mL/50 L water/100 sq m • Canola: 500 mL/ha • Citrus: 55-90 mL/hL • Cucurbits: 55-90 mL/hL • Fruit fly lure: 435-870 mL/hL • Grape vines: 55-90 mL/hL • Lucerne: 80-500 mL/ha • Mosquito resting sites : 200-300 mL/ha • Onions : 75 mL/hL • Ornamentals: 55-90 mL/hL • Pastures: 520-950 mL/ha • Peas: 550 mL/ha • Pome fruit 55 ml/hL • Rice: 260 mL/hL • Stone fruit: 55 mL/hL • Sunflower: 550 mL/ha • Tomatoes: 55-90 mL/hL • Vegetables (beans, cabbage, carrots, cauliflowers, celery, lettuce, tomatoes): 55-90 mL/hL
Lannate L	Methomyl 225 g/L	47336/0905	1.5-2.0 L/ha (pre-transplant) 45-100 mL/hL (after transplant)	<ul style="list-style-type: none"> • Apples: 150-200 mL/hL • Broad beans, French beans, navy beans, long beans: 100 mL/hL or 0.5-2 L/ha • Blueberries: 100 mL/hL • Brussel sprouts, cabbages, cauliflowers, broccoli: 100 mL/hL or 1-2 L/ha • Canola: 0.5-2 L/ha • Capsicum: 150-200 mL/hL or 1.5-2 L/ha • Centrosema pascuorum seed crops: 1.5-2 L/ha • Citrus: 25-200 mL/hL or 0.25-2 L/ha • Cotton: 0.5-2.4 L/ha • Duboisia: 100 mL/hL or 1 L/ha • Ginger: 150 mL/hL or 1.5 L/ha • Grapes: 150 mL/hL

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Guar: 2 L/ha • Hops: 2 L/ha • Lentils: 1.5-2 L/ha • Linseed: 1.5-2 L/ha • Lucerne: 1-2 L/ha • Lupins: 1-2 L/ha • Maize: 100-200 mL/hL or 1-2 L/ha • Mint: 1.5-2 L/ha • Mung beans: 0.5-2 L/ha • Native pastures: 1.5-2 L/ha • Pasture legume seed crops: 1.5-2 L/ha • Peaches and nectarines: 100-150 mL/hL • Peanuts: 1.5-2 L/ha • Pears: 150-200 mL/hL • Peas, chickpeas, pigeon peas: 100 mL/hL or 1-2 L/ha • Poppies: 1.5-2 L/ha • Potatoes: 1.5- 2 L/ha • Sesame seed: 1.5-2 L/ha • Sorghum: 0.5-2 L/ha • Soybeans: 0.5-2 L/ha • Stone fruit: 200 mL/hL • Strawberries: 150-200 mL/hL, or 1.5 L/ha • Sunflowers: 0.5-2 L/ha • Sweet corn: 100-200 mL/hL or 1-2 L/ha • Tea tree: 1.5-2 L/ha • Tomatoes: 50-200 mL/hL, or 0.5-2 L/ha • Wheat, oats, barley: 1-2 L/ha
Mancozeb 750 DF	Mancozeb 75 g/kg WG	48049/1208	200 g/hL or 2.2 kg/ha	<ul style="list-style-type: none"> • Citrus: 200 g/hL • Custard apples: 200 g/hL • Grape vines: 150-200 g/hL • Mangoes: 200 g/hL • Passion fruit : 150-200 g/hL • Pawpaw : 200 g/hL • Apples, pears : 150-200 g/hL • Stone fruits: 150-200 g/hL • Cotton: 2.5 kg/ha • Peanuts: 1.7-2.2 kg/ha • Pulse crops: 1-2.2 kg/ha • Poppies: 2.5 kg/ha • Soybeans: 2.2 kg/ha • Green beans, broadbeans, faba beans, sugar snap and snow peas: 150-200 g/hL or 1.7-2.5 kg/ha • Peas: 150-200 g/hL or 1.7-2.2 kg/ha • Capsicum: 150-200 g/ha; 2-3 kg/ha • Carrots: 150-200 g/ha; 1.7-2.2 kg/ha • Celery: 150-200 g/ha; 1.7-2.2 kg/ha • Cole crops: 150-200 g/ha; 1.7-2.2 kg/ha • Cucurbits: 150-200 g/ha;1.7-2.2 kg/ha • Fennel: 2.2 kg/ha • Potatoes: 150-200 g/ha; or 1.7-2.2 kg/ha • Rhubarb: 150-200 g/ha; or 1.7-2.2 kg/ha • Silver, beet, spinach, beetroot: 150-200 g/ha; or 1.7-2.2 kg/ha • Tomatoes: 150-200 g/ha; or 2-3 kg/ha • Lettuce: 150-200 g/ha; or 1.7-2.2 kg/ha • Onion and garlic: 150-200 mL/hL, or 2.2-3.5 L/ha • Bananas: 200 g/hL, or 2.2-4.5 kg/ha • Carnations: 150-200 g • Flowers, shrubs: 150-200 g/hL • Ferns: 75-100 g/hL

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Gladioli: 150-200 g/hL • Roses: 150-200 g/hL • Turf: 200-250 g/100 sq m
Larvin 800 WG	Thiodicarb 800 g/kg - WG	48522/0902	33 g/hL	<ul style="list-style-type: none"> • Brassica crops: 0.47-0.94 kg/ha • Cotton: 0.94-1.2 kg/ha • Maize, sweet corn: 0.7-0.94 kg/ha • Pulses, navy beans, soybeans, mung beans, pigeon peas, chickpeas: 0.235-0.350 g/ha • Tomatoes: 0.233-0.655 kg/ha or 33-46 g/hL
Metholachlor 720	Metholachlor 720 g/kg	51535/0201	3 L/ha	<ul style="list-style-type: none"> • Broccoli, Brussels sprouts, cabbages, cauliflower: 3-4 L/ha • Canola: 0.3-0.5 L/ha • Cotton: 2 L/ha • Green beans, navy beans: 3-4 L/ha • Maize, sweet corn: 2-4 L/ha • Pastures (clovers, phalaris and cocksfoot) : 0.4-0.5 L/ha • Peanuts: 2-4 L/ha • Sorghum: 2-4 L/ha • Sweet potatoes: 3 L/ha • Wheat, barley, oats, triticale: 0.3-0.5 L/ha
Miti-Fol EC	Dicofol 240 g/L - EC	47207/024	150 mL/hL	<ul style="list-style-type: none"> • Babacos: 200 mL/hL • Bananas: 200-250 mL/hL • Citrus: 200 mL/hL • Cotton: 4 L/ha • Grapevines: 140 mL/hL • Hops: 200 mL/hL • Mangoes: 200 mL/hL • Olives: 250 mL/hL • Ornamentals: 200 mL/hL • Pawpaws: 200 mL/hL • Pome fruit: 200 mL/hL • Stone fruit: 200 mL/hL • Strawberries: 200 mL/hL • Tomatoes: 200 mL/hL • Vegetables: 200 mL/hL
Nemacur 400	Fenamiphos 400 g/L	33295/1103	24 L/ha (band treatment 16 mL/10 m of row)	<ul style="list-style-type: none"> • Aloe vera planting material: 1 L/hL • Aloe vera: 30-60 L/ha • Banana planting material: 100 mL/hL • Bananas: 30-60 ml/10 m of row, or 3-6 mL/stool, or 3-6 mL/sq m, or 30-60 L/ha of wetted area metered into the irrigation water • Citrus: 37.5-75 L/ha or 3.8-7.5 mL/sq m trickle irrigation • Crucifers: 24 L/ha • Cucurbits: 24 L/ha or 16 mL/10 m of row • Carrots, beetroot, onions, celery, sweet potatoes: 24 L/ha or 16 mL/10 m of row • Lettuce: 24 L/ha or 16 mL/10 m of row • Endive: 24 L/ha or 16 mL/10 m of row • Parsnips: 24 L/ha or 16 mL/10 m of row • Grapevines: 30 L/ha or 3 mL/sq m (trickle irrigation) • Mushrooms: 65 mL/20 L water/ton of compost, or 55 mL/ton of compost, or 10 mL/bale of peat weigh in 50-60 kg, or 55 mL/1 ton of casing • Ornamentals, annual: 24 L/ha, or trickle irrigation 16 mL/10 m of row • Ornamentals, perennial, nursery root stock: 24 L/ha, or 16-32 mL/10 m of row (trickle irrigation) • Bulbs: 24 L/ha, or 16 mL/10 m of row

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Chrysanthemums: 100 mL/hL or 1 L/ha • Pineapples: 250 mL/100 m of preplant bed treatment, 6 L/ha for plant crop and ratoon crop foliar spray, and 12 L/ha for ratoon crop foliar spray only • Potatoes: 13 L/ha (rows 80 cm apart) or 110 mL/100 m of row • Strawberries: 24 L/ha or 16 mL/10 m of row • Or 16 mL/10 m of row (trickle irrigation) • Sugar cane: 10 L/ha • Tomatoes: 24 L/ha or 16 mL/10 m of row, or 16 mL/10 m of row trickle irrigation
Orthene	Acephate 970 g/kg	50469/0105	0.8 kg/ha, or 80 g/hL	<ul style="list-style-type: none"> • Bananas: 65-130 g/hL Brussels sprouts: 0.8-1 kg/ha, or 80-100 g/hL • Cabbages, cauliflowers, broccoli: 0.8-1 kg/ha, or 80-100 g/hL • Macadamias: 50-80 g/hL until run-off • Ornamentals: 1 kg/ha, or 100 g/hL • Potatoes: 0.5 kg/ha or 50 g/hL • Tomatoes: 0.8-1 kg/ha, or 80—100 g/hL
Parashoot 500 EC	Parathion methyl 500 g/L - EC	48441/0306	100 mL/hL	<ul style="list-style-type: none"> • Cotton: 550-2.2 L/ha • Clover seed crops: 0.8 L/ha • Cruciferous crops, vegetable crops: 65 mL/hL, or 0.7 kg/ha • Beans: 65 mL/hL, or 0.7 kg/ha • Potatoes: 65 mL/hL, or 0.7 kg/ha • Tomatoes: 65 mL/hL, or 0.7 kg/ha • Pome and stone fruit: 40-100 mL/hL
Point	Oxyfluorfen 240 g/L	53222/0700	4 L/ha	<ul style="list-style-type: none"> • Tree fruit, nuts and vines not less than 3 years old: 3-4 L/ha • Duboisia: 4-8 L/ha • Mango, avocado, passion fruit, kiwi, custard apple, lychee, pawpaw, longan, rambutan: 4 L/ha • Cabbages, cauliflowers, broccoli: 1.5-2 L/ha • Onions: 50-500 mL/ha • Coffee: 2-4 L/ha • Forestry trees: 4 L/ha or 4 mL/10 sq m • Pyrethrum: 4-6 L/ha
Polyram DF	Metiram 700 g/kg - DF	58901/0107	200-250 g/hL (high volume of water), or 2.2-2.7 kg/ha (low volumes of water)	<ul style="list-style-type: none"> • Apple: 150-200 g/hL • Grapevines: 150-200 g/hL • Pears: 150-200 g/hL • Stone fruit: 150 g/hL • Asparagus: 200-300 g/hL (high volume of water) or 2.2-3.5 kg/ha (low volume of water) • Beans: 200-300 g/hL (high volume of water) or 2.2-3.5 kg/ha (low volume of water) • Cabbages, cauliflowers, Brussels sprouts, broccoli: 200-300 g/hL (high volume of water) or 2.2-3.5 kg/ha (low volume of water) • Carrots: 200 g/hL (high volume of water) or 2.2 kg/ha (low volume of water) • Celery: 200 g/hL (high volume of water) or 2.2 kg/ha (low volume of water) • Cucumbers: 200 g/hL (high volume of water) or 2.2 kg/ha (low volume of water) • Other cucurbits: 200 g/hL (high volume of water) or 2.2 kg/ha (low volume of water) • Lettuce: 200 g/hL (high volume of water) or 2.2 kg/ha (low volume of water) • Potatoes: 150-200 g/hL (high volume of water) or 1.7-2.5 kg/ha (low volume of water) • Tomatoes: 150-200 g/hL (high volume of water) or

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				1.7-2.2 kg/ha (low volume of water)
Ridomil Gold 480 EC	Metalaxyl M 480 g/L - EC	50267/0202	Seedbed: 1.5 mL/15 L water/60-80 sq m (= 187-250 mL/1900-2500 L of water/ha)	<ul style="list-style-type: none"> • Pineapple: 500 mL/2000-5000 L water/haRidomil Gold MZ WG
Ridomil Gold MZ WG	Metalaxl M 40 g/kg + Mancozeb 640 g/kg- WG	52926/0902	Seedbed: 18 g/15 l water/60-80 sq m (=2.25-2.9/1900-2500 L of water/ha) Field: 250 g/hL	<ul style="list-style-type: none"> • Grapevines: 250 g/hL • Cucurbits: 250 g/hL or 2.5 kg/ha (2.5 kg/ha aerial spraying) • Lettuce: 250 g/hL or 2.5 kg/ha (2.5 kg/ha aerial spraying) • Onions: 250 g/hL or 2.5 kg/ha (2.5 kg/ha aerial spraying) • Ornamentals: 150-250 g/hL or 2.5 kg/ha • Potatoes: 250 g/hL or 2.5 kg/ha (2.5 kg/ha aerial spraying) • Poppies: 2.5 kg/ha • Rhubarb: 2.5 kg/ha • Strawberries: 100 g/hL
Royal MH	Maleic hydrazide potassium salt 250 g/L	50800/0108	8-11 L/ha	<ul style="list-style-type: none"> • Potato: 11 L/ha • Onion, garlic: 11 L/ha
Rugby 100 G	Cadusafos 100 g/kg WG	45834/0901	60 kg/ha	<ul style="list-style-type: none"> • Bananas: max 60 g/stool/year in 2-3 application (hand application); 1.3-2 kg/100 m row 3 times per year or 2 kg/100 m of row twice per year (mechanical application on single row); .2.6 kg/100 m row 3 times per year or 4 kg/100 m of row twice per year (mechanical application on double row) • Citrus: 45-50 g/sq m/year (hand application); 6-10 kg/100 m row/year • Ginger: 100-300 kg/ha • Sugar cane: 20-40 kg/ha, or 300-600 g/100 m of row) • Tomatoes: 100 kg/ha
Saboteur	Dimethoate 400 g/L	49600/1107	80 mL/hL	<ul style="list-style-type: none"> • Abius, babacos, carambolas, casimiroas, granadillas, santois, sapodillas, wax jambus: 75 mL/hL • Avocado: 75 mL/hL • Banana: 75 mL/hL • Citrus fruit: 75-150 mL/hL • Custard apples: 75 mL/hL • Grapes: 75 mL/hL • Mangoes: 75 mL/hL • Pawpaw, passion fruit: 75 mL/hL • Apples, pears, quinces: 75-150 mL/hL • Stone fruits, except apricots and early peach varieties : 75 mL/hL • Bean: 75 mL/hL • Beans, peas: 350-650 mL/ha • Beetroot, silverbeet, lettuce, celery: 75 mL/hL, or 800 mL/ha • Blueberries: 75 mL/hL • Berry fruit: 75 mL/hL • Capsicum: 75 mL/hL or 750 mL/ha • Cucurbits: 75 mL/hL or 750 mL/ha • Leafy vegetables (cole crops, lettuce, silver beetm, celery): 75 mL/hL • Leucaena: 340 mL/ha • Litchi: 75 mL/hL or 750 mL/ha

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Peas: 75 mL/hL or 800 mL/ha • Potatoes: 75 mL/hL • Root vegetables: 75 mL/hL • Strawberries: 75 mL/hL • Tomatoes: 60-75 mL/hL or 750 mL/ha • Legumes, fruiting vegetables, cucurbits, leafy vegetables, stalk vegetables, stem vegetables, cole crops, root vegetables, bulb vegetables and tuber vegetables: 75 mL/hL or 750 mL/ha • Cowpeas, mung bean, navy bean, pigeon pea: 800 mL/ha • Adzuki beans: 75 mL/hL or 800 mL/ha • Cereals: 55- 750 mL/ha, or 75 mL/hL • Cowpeas: 500-800 mL/ha • Cotton: 340-750 mL/ha • Grain legumes: 75-85 mL/hL or 800 mL/ha • Lentils: 90 mL/ha • Lucerne: 55-375 mL/ha • Maize : 500 mL/ha • Mung bean : 500-800 mL/ha • Navy bean : 500 mL/ha • Oil seeds: 40- 750 mL/ha, or 75 mL/hL • Pastures, pasture seed and forage crops: 150-375 mL/ha • Peanuts: 350 mL/ha • Sorghum: 500 mL/ha • Soy bean: 340 mL/ha • Sunflower: 340-800 mL/ha • Ornamentals: 75 mL/hL • Trees (eucalyptus, kurrajongs, flame trees, umbrella trees): 75 mL/hL • Wild flowers, proteas: 75 mL/hL • Duboisia: 75 mL/hL • Oil tea tree: 340 mL/ha
Sonic 200 EC	Cypermethrin 200 g/L - EC	46088/0700	38-50 mL/hL in 10 hL/ha	<ul style="list-style-type: none"> • Cabbages, cauliflowers, Brussels sprouts, broccoli, kale, kohlrabi, Chinese cabbage, turnips: 400 mL/ha; or 50 mL/hL(in 6-10 hL/ha) • Canola: 50-250 mL/ha • Winter cereals: 50-170 mL/ha • Chickpeas: 200-250 mL/ha • Cotton: 375-625 mL/ha • Faba beans: 200-250 mL/ha • Field peas: 160-250 mL/ha • Lupins: 75-300 mL/ha • Maize: 300-500 mL/ha • Sorghum: 190-500 mL/ha • Soybeans, navy and mung beans : 300-500 mL/ha • Sunflowers: 380-500 mL/ha • Sweet corn: 380-500 mL/ha • Tomatoes: 130-400 mL/ha or 18-50 mL/hL (in 2-10 hL/ha)
Sumi-alpha Flex insecticide	Esfenvalerate 50 g/L	53047/1200	25-50 mL/hL	<ul style="list-style-type: none"> • Cabbages, cauliflowers, Brussels sprouts, broccoli, kale, kohlrabi: 190-380 mL/ha, or 25 mL/hL in 2.5-15 hL/ha • Broad beans: 130-330 mL/ha • Canola: 70-500 mL/ha • Celery: 50 mL/hL • Cereals, pastures: 70 mL/ha • Chickpeas: 130-500 mL/ha • Chou mollier, fodder rape: 70-500 mL/ha • Cotton: 400-700 mL/ha

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Field peas: 70-330 mL/ha • Garden peas: 130-500 mL/ha • Green beans: 130-330 mL/ha • Lentils: 130-330 mL/ha • Linseed: 130-500 mL/ha • Lucerne: 130-500 mL/ha • Lupins: 35-330 mL/ha • Maize: 300-500 mL/ha • Mung beans : 400-500 mL/ha • Navy beans : 400-500 mL/ha • Pastures: 35-70 mL/ha • Pigeon peas: 130-500 mL/ha • Safflower: 130-330 mL/ha • Sorghum: 100-450 mL/ha • Soybeans: 130-500 mL/ha • Sunflower: 130-500 mL/ha • Sweet corn: 300-500 mL/ha • Tomatoes: 12-55 mL/hL, or 130-400 mL/ha • Wheats, oats and barley: 130-330 mL/ha • Winter cereals: 70-300 mL/ha
Zee-Mil*MZB 680 WP	Metalaxyl 40 g/kgg + mancozeb 640 g/kg - WP	50431/03014	Seedbed: 37.5 g/15 l water/60-80 sq m (=4.68-6.22 kg/ha) Field: 250 g/hL	<ul style="list-style-type: none"> • Cucurbits: 2.5 kg/ha or 250 g/hL • Lettuce: 2.5 kg/ha, or 250 g/hL • Onions: 2.5-4.4 kg/ha, or 250-440 g/hL • Potatoes: 2.5 kg/ha, or 250 g/hL
Brazil				
Actara 250 WG	Thiametoxam 250 g/kg - WG	010098	Seedbeds: 0.6 g/sqm Field: 600-840 g/ha (max 2 applications)	<ul style="list-style-type: none"> • Pineapple: 600-800 g/ha (max 2 appliactions) • Courgette: 400-600 g/ha (max 1 application) • Peanuts: 100-140 g/ha (max 3 applications) • Lettuce: 200-300 g/ha • Cotton: 100-200 g/ha (max 2 applications) • Rice: 100-150 g/ha (max 1 application) • Potato: 50-800 g/ha (max 5 applications) • Eggplant: 400-600 g/ha (max 1 application) • Coffee: 1,400-2,000 g/ha (1-2 applications) • Sugar cane: 400-1,000 g/ha (max 2 applications) • Citrus fruit: 600 g/h, or 10-20 g/hL (1 application on the trunk and max 2 foliar applications) • Chrysanthemum: 400 g/ha (as many as necessary) • Peas: 20 g/hL, or 150-200 g/ha • Beans: 100-600 g/ha (max 3 applications) • Apple: 2,000 g/ha • Papaya: 400-800 g/ha (max 3 applications) • Watermelon: 60-600 g/ha (max 4 applications) • Melon: 60-600 g/ha (max 4 applications) • Strawberry: 10 g/hL (max 2-3 applications) • Summer squash: 400-600 g/ha (1 application) • Pepper: 400-600 g/ha (1 application) • Cabbage: 20 g/hL, 50-800 g/ha (max 4 applications) • Tomato: 12-20 g/hL, or 800 g/ha (max 5 applications) • Wheat: 75 g/ha (max 3 applications) • Grapes: 680 g/ha (max 2 applications)
Antracol	Probineb 700 g/kg - WP	00901	Seedbed s: 400 g/hL	<ul style="list-style-type: none"> • Potato : 2.1 kg/ha • Onion : 2.1 kg/ha • Beans : 1.4 kg/ha • Apple : 140 g/hL (2.8 kg/ha)

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Tomatoes: 2.1 kg/ha • Grapes: 210 g/hL (2.kg/ha)
Boral 500 SC	Sulfentrazone 500 g/L - SC	07495	0.6-08 L/ha (100-200 L water/ha)	<ul style="list-style-type: none"> • Pineapple: 0.8-1.4 L/ha (200 L water/ha) • Coffee: 1.4 L/ha (100-200 L water/ha) • Sugar cane: 1.2 L/ha (300-400 L water/ha) • Citrus fruit: 1.2-1.4 L/ha (100-200 L water/ha) • Soybean: 0.2-1.2 L/ha (250-300 L water/ha)
Bulldock 125 SC	Beta-cyfluthrin 125 g/l - SC	01192	60 mL/ha	<ul style="list-style-type: none"> • Pineapple: 80 mL/ha • Pepper: 10 mL/hL • Cotton: 80 mL/ha • Garlic: 10 mL/hL • Peanuts: 40 mL/ha • Rice: 30-50 mL/ha • Potato: 100 mL/ha • Eggplant: 10 mL/hL • Coffee: 30-40 mL/ha • Onion: 10 mL/hL • Cabbage: 10 mL/hL • Beans: 50 mL/ha • Manioca: 50 mL/ha • Millet: 40 mL/ha • Soybean: 20-60 mL/ha • Tomato: 10 mL/hL • Wheat: 40 mL/hL
Cefanol	Acephate 750 g/kg SP	1378704	0.75-1 kg/ha	<ul style="list-style-type: none"> • Cotton: 0.4-1 kg/ha • Peanut: 0.4-0.5 kg/ha • Potato, beans: 0.1 kg/hl water • Peppers, tomatoes: 0.4-06 kg/ha • Roses: 0.4-0.8 kg/ha
Certero	Triflururon 480 g/L - SC	04899	Seedbed (float): 15 mL/14.7sqm Field: 250 mL/ha (max 1 application)	<ul style="list-style-type: none"> • Zucchini: 75 mL/ha (max 4 applications) • Cotton: 30 mL/ha (1-2 applications) • Potato: 400 mL/ha (max 6 applications) • Sugar cane: 50 mL/ha (1 application) • Citrus fruit: 10 mL/hL (max 3 applications) • Millet: 50 mL/ha (1-2 applications) • Soybean: 30 mL/ha (1-2 applications) • Tomato: 30 mL/hL (4 applications) • Wheat: 30 mL/ha (1-2 applications)
Confidor 700 WG	Imidacloprid 700 g/kg - WG	006294	Seedbed: 15 g/50 sqm (1 application) Field: 360 g/ha (1 application)	<ul style="list-style-type: none"> • Pineapple: 30 g/hL (1 application) • Squash, summer squash, watermelon, cucumber: 200-300 g/ha (1 application) • Lettuce: 300 g/ha (1 application) • Chicory, endive: 300 g/ha (1 application) • Cotton: 70-100 g/ha (repeat as needed) • Garlic, onion: 100 g/ha (1 application) • Potato: 100-360 g/ha (1 application) • Eggplant, jilò: 200-300 g/ha (1 application) • Sugar cane: 400 g/ha (1 application) • Cabbage, rape and broccoli: 200-300 g/ha (1 application) • Cauliflower: 200-300 g/ha (1 application) • Citrus fruit: 5-10 g/hL (1 application) • Chrysanthemum: 100 g/ha (2 applications) • Termite cones: 30 g/hL • Eucalyptus (nursery and field): 500-750 g/hL (1 application) • Poinsettia: 30 g/hL (2 applications) • Beans: 150-250 g/ha (1 application)

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Gerbera: 30 g/hL (2 applications) • Melon: 200-300 g/ha (1 application) • Pepper: 200-300 g/ha (1 application) • Pine tree (nursery and field): 37.5-75 g/hL (1 application) • Tomato: 200-300 g/ha (1 application)
Decis 25 EC	Deltamethrine 25 g/L - EC	00758498	160-200 mL/ha	<ul style="list-style-type: none"> • Pineapple: 200 mL/ha • Cotton: 100-400 mL/ha • Garlic, onion: 30 mL/hL • Plum: 50 mL/hL • Peanuts: 200 mL/ha • Rice 100-200 mL/ha • Potato: 40 mL/hL • Eggplant, pepper and tomato: 30-50 mL/hL • Broccoli, cabbage, cauliflower, rape: 30 mL/hL • Cocoa: 200-250 mL/ha • Coffee: 100-150 mL/1000 plants • Cashew: 200 mL/ha • Citrus fruit: 30-50 mL/hL • Eucalyptus: 15 mL/hL • Beans: 120-200 ml/ha • Green beans: 30 mL/hL • Fig: 50 mL/hL • Gladiolus: 30 mL/hL • Apple: 40 mL/hL • Melon and watermelon: 30 mL/hL • Millet: 200 mL/ha • Pastures: 300-400 mL/ha • Cucumber: 30 mL/hL • Peach: 40 mL/hL • Rubber tree: 200 mL/ha • Soybean: 200 mL/ha • Sorghum: 200-300 mL/ha • Wheat: 200 mL/ha
Devrinol 500 PM	Napropamide 500 g/kg - WP	2368500	4-6 kg/ha	<ul style="list-style-type: none"> • Tomato: 4-6 kg/ha
Dithane NT	Mancozeb 80% WP	02438798	Use in seedbed only: 2 kg/ha	<ul style="list-style-type: none"> • Potato, tomato, eggplant, peppers: 3 kg/ha • Abobora (Cucurbita pepo): 2 kg/ha • Pepino: 2.5-3 kg/ha • Watermelon, melon: 1-2 kg/ha • Onion, garlic: 2.5-3 kg/ha • Peanut: 2 kg/ha • Wheat: 2.5 kg/ha • Rice: 2-4.5 kg/ha • Coffee: 4-5 kg/ha • Beans: 2-3 kg/ha • Citrus fruit: 0.2-0.25 kg/hl water • Apples, figs: 0.2 kg/hl water • Mango, peach: 0.2 kg/hl water • Grapes: 0.25-0.35 kg/hl (6-20 hl/ha) • Sugar beet, carrot, broccoli, Brussels sprouts, cabbage, cauliflower: 2-3 kg/ha • Flowers: 0.8-2 kg/ha
Furadan	Carbofuran 10% GR	2088591	7.5-10 kg/ha	<ul style="list-style-type: none"> • Wheat: 7.5-10 kg/ha • Tomatoes: 7.5-40 kg/ha • Brussels sprouts: 20 kg/ha • Sugar cane: 30 kg/ha

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Carrots: 40 kg/ha • Coffee: 8-33 kg/ha • Potato: 15-40 kg/ha • Rice: 2.5-4 kg/ha • Peanut: 7.5-10 kg/ha • Cotton: 15-30 kg/ha
Gamit	Clomazone 500 g/L EC	1428691	1.6-2 L/ha with a water volume of 150-300 L/ha	<ul style="list-style-type: none"> • Cotton: 1.6-2 L/ha • Rice: 1.4-1.8 L/ha • Irrigated rice: 0.8-1.2 L/ha • Sugar cane: 1.8-2.2 L/ha • Manioca : 2-2.5 L/ha • Pepper : 1.5-2 L/ha • Soybean : 1.6-2.4 L/ha • All with a water volume of 150-300 L/ha
Herbadox 500 CE	Pendimethalin 500 g/L - EC	1258789	1.5-3 L/ha	<ul style="list-style-type: none"> • Cotton : 1.5-3 L/ha • Garlic : 2-3.5 L/ha • Peanuts : 1.5-3 L/ha • Rice : 2.5-3.5 L/ha • Potato : 2-3 L/ha • Coffee : 2.5-4 L/ha • Sugar cane : 2-3.5 L/ha • Onion : 2-3.5 L/ha • Eans : 1.5-3 L/ha • Millet : 2-3.5 L/ha • Soybean : 1.5-3 L/ha • Wheat : 2-3.5 L/ha
Karathane Zeon 50 CS	Lambda-cyhalothrin 50 g/L - SC	01700	100 mL/ha (max 1 application)	<ul style="list-style-type: none"> • Cotton: 100-400 mL/ha (max 3 applications) • Rice: 100-150 ml/ha (max 1 application) • Peanuts: 100 mL/ha (1-3 applications) • Potato: 50-100 mL/hL (1-5 applications) • Coffee: 100 ml/ha (max 2 applications) • Onion: 100 ml/ha (1-3 applications) • Citrus fruit: 15-20 mL/hL (1 application) • Cabbage: 30 mL/hL (2 applications) • Beans: 150-600 mL/ha (max 2 applications) • Melon : 40-50 mL/hL (max 4 applications) • Millet : 150-600 ml/ha (max 1 application) • Strawberry : 80 mL/hL (2 applications) • Soybeans: 75-150 ml/ha (max 2 applications) • Tomato: 30-50 mL/hL (max 5 applications) • Wheat: 100 mL/ha (2 applications) • Grapes: 50 mL/hL (max 2 applications)
Lebacycid 500	Fenthion 550 g/L - EC	0298401	2 L/ha	<ul style="list-style-type: none"> • Coffee : 1-1.5 L/ha • Persimmon : 100 g/hL • Citrus fruit : 600-800 mL/ha • Guava and manog : 100 mL/hL • Apple : 100 mL/hL • Passion fruit : 100 mL/hL • Melon, watermelon, cucumber, summer squash : 100 mL/hL • Loquat and plums: 100 mL/hL • Peach: 100 mL/hL • Pear and quince: 100 mL/hL • Grapes: 100 mL/hL • Termites cones: 200 mL/hL
Orthene 750 BR	Acephate 75% SP	02788394	0.5-1.0 kg/ha	<ul style="list-style-type: none"> • Cotton: 0.4-1.5 kg/ha • Peanut: 0.4-1.0 kg/ha • Potato: 0.1 kg/hL (400-1500 L/ha) • Brassicaceae, Tomato, Pepper: 0.1 kg/hL (500-1000 L/ha)

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Beans: 0.2-1.0 kg/ha • Soybean: 0.2-1.0 kg/ha • Flowers: 0.1 kg/hL (400-600 L/ha) • Citrus fruit: 0.05 kg/hL • Melon: 0.25 kg/ha (400 L/ha)
Poast	Etoxidim 184 g/L - DC	1128798	1.2 L/ha	<ul style="list-style-type: none"> • Cotton: 1-1.25 L/ha • Beans: 1-1.25 L/ha • Gladiolus: 1-1.25 L/ha • Millet: 1-1.25 L/ha • Soybeans: 1-1.25 L/ha
Positron Duo	Iprovalicarb 55 g/kg + probineb 613 g/kg - WP	08901	0.2-0.3 kg/hL (max 7 applications)	<ul style="list-style-type: none"> • Potato: 2.5 kg/ha (max 5 applications) • Onion: 2-2.5 kg/ha (max 6 applications) • Melon: 2-2.5 kg/ha (max 6 applications) • Pepper: 2.5 kg/ha (max 4 applications) • Tomato: 2.5 kg/ha (max 7 applications) • Grapes: 2-2.5 kg/ha (max 5 applications)
Pounce 384 CE	Permethrin 384 g/L - EC	2968399	50-130 mL/ha	<ul style="list-style-type: none"> • Cotton: 160-325 mL/ha • Coffee: 130 mL/ha • Cabbage, cauliflower, rape: 87 mL/hL • Millet: 65-130 mL/ha • Soybean: 40-130 mL/ha • Tomato: 16.25-32.5 mL/hL • Wheat: 65-130 mL/ha
Primeplus	Flumetralin 125 g/L - EC	000293	3-4 L/ha	
Ridomil Gold MZ	Mefenoxam 40 g/kg + Mancozeb 640 g/kg - WP	09599	Seedbeds: 1.25 g/sqm (max 4 applications)	<ul style="list-style-type: none"> • Potato: 2.5 kg/ha (max 4 applications) • Onion: 2.5 kg/ha (max 4 applications) • Tomato: 300 g/hL (max 4 applications) • Grapes: 250 g/hL (max 4 applications) • Rose: 300 g/hL (max 4 applications)
Trebon 100 SC	Etofenprox 100 g/L SC	02998	0.5 L/ha (300 L/ha)	<ul style="list-style-type: none"> • Cotton: 0.5-0.75 L/ha (150 L/ha) • Citrus fruit: 0.01-0.025 L/hL • Beans: 0.3-1.2 L/ha (250 L/ha) • Millet: 0.1-0.14 L/ha (300 L/ha) • Soybean: 0.12 L/ha (250 L/ha) • Tomato: 0.2 L/hL (300 L/ha) • Wheat: 0.3 L/ha (100 L/ha)
Canada				
Aliette	Fosetyl Al 80% WDG	27688	2.5-3.25 kg/ha (450-560 L/ha) (3-4 applications per year) Max 10 kg/ha/year	<ul style="list-style-type: none"> • Apples: 2-5 kg/ha (3 applications/year) • Lettuce (greenhouse): 0.03 kg/100 m² (20 L/100m²) (2 applications) • Lettuce, Onions: 2.8 kg/ha (min 150 L/ha) – (Max 5 applications/year) • Raspberry, Blackberry, Ginseng: 5.5 kg/ha (200-1000 L/ha) (max 4 applications/year) • Strawberry: 5.6 kg/ha (200-1000 L/ha) (max 4 applications/year) • Broccoli, Bok choy: 2.25-3.125 kg/ha (max 5 applications/year)
Decis 5EC	Deltamethrin 50 g/L EC	22478	Seedbeds (greenhouse): 4mL/15 L (0.0266 L/hL) Field: 0.2 L/ha Ground pre-	<ul style="list-style-type: none"> • Alfalfa: 0.2-0.25 L/ha • Apples: 0.15-0.25 L/ha • Asparagus: 0.2 L/ha • Blueberries: 0.125-0.15 L/ha Broccoli, Brussels sprouts, cabbage, cauliflower: 0.15-0.2 L/ha • Rapeseed, mustard: 0.1-0.15 L/ha Corn: 0.25-0.3 L/ha • Kale: 0.2 L/ha • Onions: 0.2 L/ha

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
			transplant: 0.1-0.4 L/ha	<ul style="list-style-type: none"> • Peaches: 0.2 L/ha • Pears: 0.2-0.35 L/ha • Peppers: 0.25-0.3 L/ha • Potatoes: 0.1-0.25 L/ha • Rangeland pastures: 0.1-0.15 L/ha Shelterbelts: 0.045 L/hL • Strawberries: 0.2 L/ha • Sunflower: 0.1 L/ha • Tomato: 0.1-0.15 L/ha • Wheat, barley, oats, flax: 0.2 L/ha • Commercial greenhouse floriculture crops: 0.035-0.05 L/hL)
Devrinol 50-DF	Napropamide 50% DF	25231	2.25-4.5 kg/ha	<ul style="list-style-type: none"> • Raspberries: 4-9 kg/ha • Strawberries: 9 kg/ha • Blueberries, blackberries, boysenberries, loganberries, strawberries: 9 kg/ha • Apples, apricots, cherries, peaches, pears, plums: 7-9 kg/ha • Basil: 2.2-4.4 kg/ha • Asparagus: 2.25-13.4 kg/ha • Cabbage, broccoli, cauliflower, Brussels sprouts: 2.25-4.5 kg/ha • Rutabagas: 2.2-4.4 kg/ha • Ornamental and forestry nursery stock (field grown): 9 kg/ha • Cole crops: 2.25-4.50 kg/ha • Garlic: 2.24-4.5 kg/ha • Peppers: 2.24-4.5 kg/ha • Pumpkin, squash: 2.24-4.5 kg/ha • Fuzzy squash: 3 kg/ha
Diazinon 50W	Diazinon 50% WP	19576	Greenhouse seedbeds: 0.0825 L/hL Field: 0.5-0.85 kg/ha (0.03 kg/hL)	<ul style="list-style-type: none"> • Apples, pears: 0.05-0.55 kg/hL • Cherries, peaches, apricots, plums: 0.1-0.15 L/hL • Cranberries: 0.45-0.725 kg/hL • Currants, gooseberries, loganberries, blackberries, raspberries: 0.1 kg/hL • Grapes: 0.1-0.225 kg/hL • Hops: 0.5-2.25 kg/ha • Beans: 1 kg/ha • Broccoli, cauliflower, cabbage, collards, Kale, Kohlrabi: 1 kg/ha • Cantaloupe: 1-1.2 kg/ha • Carrots: 1.1 kg/ha • Cucumbers : 2.25 kg/ha • Lettuce : 1.1 kg/ha • Musk melon: 1.1-2 kg/ha • Onions: 1.1-4.5 kg/ha • Parsley: 1.1 kg/ha • Parsnips: 1.1 kg/ha • Peppers: 0.5-1 kg/ha • Potatoes: 1.1 kg/ha • Radish, turnips, salsify: 1.1 kg/ha • Rutabaga: 1.1kg/ha • Spinach, beets: 1.1 kg/ha • Squash: 1.1-2 Kg/ha • Swiss chard: 1.1 kg/ha • Tomatoes: 1.1-1.75 kg/ha • Watermelon: 1.1-1.7 kg/ha • Ornamentals: 0.5-3.5 kg/ha

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
Dithane DG Rainshield NT	Mancozeb 75% WG	20553	Greenhouse seedbeds: 0.2 kg/hL	<ul style="list-style-type: none"> • Potatoes: 1.1-2.25 kg/ha • Tomatoes: 1.1-3.25 kg/ha • Onions: 2.25-3.25 kg/ha • Cantaloupe, cucumbers, pumpkin, squash, melons, watermelon: 1.1-3.25 kg/ha • Celery: 2.25 kg/ha • Carrots: 2.25 kg/ha • Apples: 0.15-0.2 kg/hL • Ginseng: 4.4 kg/ha • Wheat: 1.1-2.25 kg/ha • Lentils: 2.25 kg/ha • Ornamentals: 1.8-3.5 kg/ha
Dylox 420 Liquid Insecticide	Trichlorfon 420 g/L	16387	Greenhouse: 0.59 L/hL Field: 2.75-7.25 L/ha	<ul style="list-style-type: none"> • Alfalfa: 0.7-2.75 L/ha • Barley, flax, oats, wheat: 1.5-2.75 L/ha • Corn: 1.5-4 L/ha • Rapeseed: 1.37-2.75 L/ha • Sugar beet: 0.7-4 L/ha • Blueberries: 2.75 L/ha • Beans: 2.75-4 L/ha • Brussels sprouts, cauliflower, cabbage: 1.5-2.75 L/ha • Carrots, rutabaga, salsify, turnips: 1.5-4 L/ha • Collards, Kale, Lettuce, Spinach: 1.5-4 L/ha • Peppers: 1.5-4 L/ha • Table beets: 1.5-4 L/ha • Tomatoes: 1.5-2.75 L/ha • Ornamentals: 2.75-4 L/ha • Trees: 1.9-2.75 L/ha
Ethrel	Ethephon 240 g/L	11580	2.75-3.75 L/ha	<ul style="list-style-type: none"> • Apples: 1.75-7 L/ha • Blueberries: 5.5-8.5 L/ha • Cherries: 2.75-5.5 L/ha • Tomatoes: 3.75 L/ha
Lannate Toss- N-Go Insecticide	Methomyl 90% SP	10868	0.54 kg/ha	<ul style="list-style-type: none"> • Apples: 0.54-2.1 kg/ha • Trees: 0.27-0.54 kg/ha • Broccoli, cauliflower, cabbage: 0.27-0.54 kg/ha • Brussels sprouts: 0.27-0.775 kg/ha • Rapeseed oil: 0.216-0.51 kg/ha • Flax: 0.22-0.27 kg/ha • Lettuce: 0.51-1 kg/ha • Peas: 0.51 kg/ha • Potatoes: 0.54 kg/ha • Snap beans: 0.55 kg/ha • Strawberries: 0.775 kg/ha • Sweet corn: 0.43-0.625 kg/ha • Tomatoes: 0.27-0.54 kg/ha • What, oat, barley: 0.27-0.54 kg/ha
Lorsban 4E	Chlorpyrifos 480 g/L EC	14879	2.4-4.8 L/ha (soil treatment) 1.125-1.2 L/ha (field)	<ul style="list-style-type: none"> • Rapeseed: 0.5-1.5 L/ha • Flax: 0.75-1.2 L/ha • Lentil: 0.58-1.2 L/ha • Corn: 1.2-2.4 L/ha • Strawberry: 1.2 L/ha • Celery, cucumber, pepper: 1.2-2.4 L/ha • Pak choi, broccoli, Brussels sprout, cabbage, cauliflower, Chinese cabbage: 1.2-2.4 L/ha • Garlic: 1.2-3.5 L/ha • Rutabaga: 1.2-2.4 L/ha • Potato: 1.2-2.4 L/ha • Sunflower: 1.2 L/ha • Sugar beet: 1.2-2.4 L/ha

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Barley, what, oats: 0.5-1.2 L/ha • Onion, carrot: 2.4-4.8 L/ha (field), 2.4-4.8 L/ha (seedling) • Filbert: 4.2-4.8 L/ha • Asian radish: 0.21 L/row • Radish: 0.085 L/row • Chinese broccoli: 0.15 L/row • Pine trees: 4.15 L/hL
Matador 120 EC	Cyhalothrin-lambda 120 g/L EC	24984	Greenhouse seedbeds: 0.0066 L/hL Field: 0.042-0.083 L/ha	<ul style="list-style-type: none"> • Apples: 0.083-0.104 L/ha • Cherries: 0.104 L/ha • Peaches, nectarines: 0.104 L/ha • Pears: 0.083 L/ha • Plums: 0.104 L/ha • Strawberries: 0.104 L/ha • Broccoli, Brussels sprouts, Cabbage, cauliflower: 0.042-0.083 L/ha • Corn: 0.083 L/ha • Potatoes, tomatoes: 0.083-0.125 L/ha • Rapeseed: 0.063-0.083 L/ha • Sunflower: 0.042-0.083 L/ha • Flax: 0.063-0.03 L/ha • Wheat, barley, oats: 0.063-0.083 L/ha • Alfalfa: 0.063-0.083 L/ha • Onions, garlic: 0.188 L/ha • Head lettuce: 0.083 L/ha • Leek: 0.188 L/ha • Choke cherry shelterbelt: 0.058 L/ha • Broccoli, Brussels sprout, cabbage, cauliflower: 0.083 L/ha
Orthene 75% Soluble Powder	Acephate 75% SP	14225	0.75-1.1 kg/ha (field) 0.75-1.5 kg/ha on cover crop before planting 1.1-1.7 kg/ha in transplant water	<ul style="list-style-type: none"> • Cabbage, Brussels sprouts, cauliflower, head lettuce, celery, corn, sweet pepper: 0.75-1.1 kg/ha • Saskatoon berries: 3.4 kg/ha • Cranberries: 0.75 kg/ha • Tomato: 1.2 kg/ha • Trees and ornamentals: 0.085-0.175 kg/hL
Pounce	Permethrin 384 g/L EC	16565	0.175-0.35 L/ha	<ul style="list-style-type: none"> • Cabbage, cauliflower, broccoli, Brussels sprouts: 0.09-0.175 L/ha • Sweet corn: 0.275-0.375 L/ha • Cereals: 0.18-0.39 L/ha • Cucumber, tomato (greenhouse): 0.26 L/hL • Ornamentals (greenhouse): 0.275 L/hL • Potato: 0.185-0.25 L/ha • Apples: 0.26-0.52 L/ha • Blueberry: 0.175 L/ha • Pear: 0.52-1 L/ha • Peaches, nectarines: 0.275-0.52 L/ha • Grapes: 0.175 L/ha
Pyrinex 480 EC	Chlorpyrifos 480 g/L EC	23705	2.4-4.8 L/ha (field) 1.125-1.2 L/ha (cover crop treatment)	<ul style="list-style-type: none"> • Rapeseed: 0.05-1.5 L/ha • Flax: 0.75-1.2 L/ha • Lentil: 0.6-1.2 L/ha • Corn: 1.2-2.4 L/ha • Strawberry: 1.17-1.2 L/ha • Asian radish: 0.21 L/ha • Radish: 0.085 L/row • Celery, cucumber, pepper: 1.2-2.4 L/ha • Pak choi, broccoli, Brussels sprout, cabbage,

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				cauliflower, Chinese cabbage: 1.2-2.4 L/ha <ul style="list-style-type: none"> • Chinese broccoli: 0.15 L/100 m row • Garlic: 1.2-3.5 L/ha • Rutabaga: 1.2-2.4 L/ha • Carrot: 2.4-4.8 L/ha • Potato: 1-2.4 L/ha • Sunflower: 1.2 L/ha • Sugar beet: 1.2-2.4 L/ha • Barley, wheat, oats: 0.5-1.2 L/ha • Onion: 2.4-4.8 L/ha • Filbert: 2.4-4.8 L/ha • Pine trees: 4.2 L/hL
Sevin XLR	Carbaryl 466 g/L LS	27876	Seedbeds: 0.15-0.175 L/100 m ² Field: 2-2.75 L/ha	<ul style="list-style-type: none"> • Ditch banks, pastures, wastelands: 1.2-3.5 L/ha • Alfalfa, clover, oats, rye, wheat, barley: 2.5-5.25 L/ha • Asparagus: 2.5-6.4 L/ha • Beans: 1.25-6.4 L/ha • Beets, broccoli, Brussels sprouts, cabbage, carrots, cauliflower, celery, Chinese cabbage, dandelion, endive, horseradish, kale, kohlrabi, lettuce, mustard greens, parsley, parsnip, radish, rutabaga, salsify, spinach, Swiss chard, turnip, watercress: 1.08-5.25 L/ha • Corn: 1.25-4 L/ha • Cucumber, melons, pumpkin, squash: 2.5 L/ha • Peas: 4.7 L/ha • Potato, tomato, eggplant, pepper: 1.25-6.4 L/ha • Rapeseed: 0.5 L/ha • Sweet white lupin: 1.2-4 L/ha • Snap beans: 5.25 L/ha • Blackberries, boysenberries, dewberries, loganberries, raspberries: 5.25 L/ha • Blueberries: 4 L/ha • Cranberries: 6.4-7.6 L/ha • Grapes: 5.25-6.4 L/ha • Strawberries: 2.5-5.8 L/ha • Chokecherry shelterbelts: 1.058 L/ha
Telone II Liquid Soil Fumigant	1,3-dichloropropene 97.5%	15893	112 L/ha (field) ; 75-90 L/ha (row)	<ul style="list-style-type: none"> • Floral crops, high value field and vegetable crops : 135-200 L/ha (field) ; 65-100 L/ha (row) • Broccoli, Brussels sprouts, cabbage, cauliflower, radish, mustard, turnip, cantaloupe, cucumber, honeydew, watermelon, pumpkin: 112-200L/ha (field); 65-100 L/ha (row) • Cane and vine fruits including raspberries and strawberries: 170-200 L/ha (field); 80-110 L/ha (row) • Deciduous orchards and grapes: 200 L/ha (field); 200 L/ha (row) • Turf areas and plant beds (forest and nursery crops) 200L/ha • Greenhouse beds: 200 L/ha (2 L/100 m²)
France				
Acrobat M DG	Dimetomrph 9% + mancozeb 60% WDG	9600103	2.5 kg/ha	<ul style="list-style-type: none"> • Potato: 2 kg/ha • Grapes: 2.5 kg/ha • Carnation: 2 kg/ha
Bion MX	Mefenoxam 38.7% + Acibenzolar-S-methyl 4%	9800320	Seedbeds: 0.2 kg/ha Field: 0.3-0.4 kg/ha	<ul style="list-style-type: none"> • No other crops are registered with this formulation

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
	WDG			
Centium 36 CS	Clomazone 360 g/L CS	2000299	1 L/ha	<ul style="list-style-type: none"> • Rapeseed: 0.33 L/ha • Horse-bean: 0.25 L/ha • Peas: 0.25 L/ha • Potatoes: 0.3 L/ha • Soybean: 0.4 L/ha • Carrots: 0.25 L/ha • Pumpkin: 0.6 L/ha • Summer squash: 0.4 L/ha • Lupin: 0.3 L/ha • Watermelon: 0.6 L/ha • Spinach: 0.2 L/ha • Carnation: 0.25 L/ha
Fusilade X2	Fluazifop-P-butyl 250 g/L EC	8400491	0.75 L/ha	<ul style="list-style-type: none"> • Sugar beet, rapeseed, sunflower, soybean, potatoes: 0.75-1.5 L/ha • Artichoke, asparagus, Swiss chard, cardoon, celery, cabbage, cucumber, spinach, strawberry, chicory, lettuce, salads, carrot, turnips, rutabaga, salsify, onion, garlic, leek, dandelion, tomato, pepper, lentils, peas, beans, horse-bean, carnations: 0.75 L/ha • Flax: 0.625 L/ha • Grapes, pome fruits, stone fruits, citrus fruits, berries, kiwi, almond, chestnut, fig, hazelnut, walnut, olive, avocado, banana, forest trees, nurseries: 1-3 L/ha • Grasses and leguminous fodder: 0.75-1.5 L/ha
Karate K	Cyhalothrin-lambda 5 g/L + pirimicarb 100 g/L (EC)	8800395	1.5 L/ha	<ul style="list-style-type: none"> • Sunflower: 1.5 L/ha • Sugar beet: 1.25-1.5 L/ha • Cereals, rapeseed: 1-1.25 L/ha • Maize, sorghum: 1.25 L/ha • Potato, peas: 1.25 L/ha • Artichoke, asparagus, carrots, beans, lettuce, salad, endive, tomato, eggplant, cabbage, cucumber, summer squash, melon: 1.5 L/ha • Swiss chard, beet: 1.25 L/ha • Spinach: 1.25-1.5 L/ha • Sweet corn: 1.5 L/ha • Parsley: 1.5 L/ha • Peas: 1.25 L/ha • Stone fruits, pome fruits, walnuts, hazelnuts, almonds, chestnuts: 0.1 L/hL • Leguminous fodder: 1.25 L/ha • Pulses: 1.5 L/ha
Karaté Zeon	Cyhalothrin-lambda 100 g/L - CS	9800336	0.075-0.125 L/ha	<ul style="list-style-type: none"> • Cereals: 0.0625-0.075 L/ha • Rapeseed: 0.05-0.075 L/ha • Colza: 0.075 L/ha • Sugar beet: 0.05-0.075 L/ha • Potato: 0.075-0.125 • Peas: 0.0625-0.075 L/ha • Horse-bean: 0.0625 L/ha • Soybean: 0.075-0.125 L/ha • Maize: 0.075-0.2 L/ha • Leguminous fodder : 0.0625-0.075 L/ha • Alfalfa : 0.075 L/ha • Flax: 0.075 L/ha • Sorghum: 0.075-0.15 L/ha • Grapes : 0.075-0.4 L/ha • Pome fruits , stone fruits, citrus fruits: 0.0075-0.0175 L/hL • Olives, hazelnuts, walnuts, chestnuts : 0.0075-0.0125 L/hL

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Almonds : 0.0075-0.02 L/hL • Currants: 0.0075-0.0175 L/hL • Raspberries and other berries: 0.0075-0.02 L/hL • Shallots, onions, leeks, asparagus, eggplant: 0.075-0.125 L/ha • Garlic: 0.075-0.125 L/ha • Swiss chard, beet: 0.05-0.075 L/ha • Cabbage, sweet corn: 0.05-0.2 L/ha • Strawberries: 0.125 L/ha • Lettuce: 0.15 L/ha • Lentils: 0.0625-0.075 L/ha • Melon: 0.2 L/ha • Spinach: 0.0625 L/ha • Pepper: 0.125-0.2 L/ha • Radish: 0.05 L/ha • Tomatoes: 0.05-0.125 L/ha • Celery, chicory, fennel: 0.125 L/ha • Aromatic plants: 0.05-0.125 L/ha • Grasses grown for grain: 0.075 L/ha • Leguminous fodder: 0.075-0.175 L/ha • Sugar beet grown for seed: 0.075 L/ha • Vegetables grown for seed: 0.0625 L/ha
Oncol S	Benfuracarb 8.6% - GR	8800677	7 kg/ha	<ul style="list-style-type: none"> • Beans, soybean: 4.7 kg/ha • Rapeseed: 5.25 kg/ha • Maize, sweet corn, sunflower, sugar beet, Swiss chard, beet, chicory, asparagus, melon: 7 kg/ha • Carrot, cabbage: 12 kg/ha
Pirimor G	Pyrimicarb 50% - WG	7500569	0.5 kg/ha	<ul style="list-style-type: none"> • Pome fruit, stone fruit, chestnuts, walnuts, hazelnuts, almonds, currants, raspberries and other berries, roses: 0.075 kg/hL • Cereals: 0.25 kg/ha • Maize, sorghum, sweet corn: 0.4 kg/ha • Potato, sunflower, sugar beet, rapeseed: 0.5 kg/ha • Peas, artichoke, eggplant, Swiss chard, beet, cardoon, chicory, carrots, cabbage, spinach, beans, peppers, asparagus, cucumber, summer squash, pumpkin, melon, tomato, strawberry, salads, parsley: 0.75 kg/ha
Prowl 400	Pendimethalin 400 g/L - SC	8900681	3.3 L/ha	<ul style="list-style-type: none"> • Rutabaga, salsify: 2 L/ha • Cereals (wheat, barley, rye, spelt): 2.5 L/ha • Peas, horse-bean, sorghum: 3 L/ha • Garlic, onion, leek, shallot, sunflower, tomato, cauliflower: 3.3 L/ha • Maize: 5 L/ha • Apples, grapes: 8 L/ha • Aromatic, medicinal and perfume plants : 1.25-3.3 L/ha • Minor seed crops: 0.8-4 L/ha
Rovral Aqua Flo	Iprodione 550 g/L - SC	9200262	Seedbeds: 1.5 L/ha	<ul style="list-style-type: none"> • Strawberry, pepper, tomato , eggplant: 1.5-2 L/ha • Carrot, beans, summer squash, shallot, garlic, onion, lettuce, salads, parsley, peas: 1.5 L/ha • Cabbage: 0.5-1.5 L/ha • Cucumber: 0.15 L/hL • Stone fruit, kiwi, almonds, hazelnuts, grapes: 0.15 L/hL • Currants, raspberry: 2 L/hL • Legumes, vegetables and sugar beet grown for seed: 1.5 L/ha • Aromatic, medicinal and perfume plants : 1.5 L/ha • Rapeseed: 1 L/ha

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
Suprême	Acetamiprid 20% -SP	2040348	0.25-0.5 kg/ha	<ul style="list-style-type: none"> Apples, stone fruits: 0.025 kg/hL Tomato, pepper, eggplant: 0.25-0.5 kg/ha Melon: 0.125 L/ha Lettuce: 0.25 kg/ha Minor seed crops: 0.5-0.25 kg/ha
Topaz	Penconazole 100 g/L - EC	8300025	0.5 L/ha	<ul style="list-style-type: none"> Apples: 0.025 L/hL Stone fruits: 0.035 L/hL Melon, cucumber, summer squash: 0.5 L/ha Strawberry: 0.5 L/ha Grapes: 0.25 L/ha
Germany				
Acrobat Plus WG	Dimetomorph 9% + Mancozeb 60% - WG	4521-00	Seedbeds: 0.4 g/m ² (4 kg/ha)	<ul style="list-style-type: none"> Potatoes, onions, leeks, endive, salads, rocket, broad beans, kohlrabi, cucumbers, nurseries: 2 kg/ha Tomato: 2-4 kg/ha Ornamentals: 2-3 kg/ha
Confidor WG70	Imidacloprid 70% - WG	4185-00	Seedbeds: 0.5 g/m ² (5 kg/ha)	<ul style="list-style-type: none"> Hops: 0.166 kg/ha Apples: 0.05 kg/ha Ornamentals: 0.15-0.35 kg/ha Grapes: 0.04-0.16 kg/ha Salads seedbeds in greenhouse: 1.3 g/m² (13 kg/ha)
Fastac SC Super Contact	Cypermethrin- alpha 100 g/L - SC	4018-00	0.06-0.12 L/ha	<ul style="list-style-type: none"> Rapeseed, mustard, beet and sugar beet: 0.1 L/ha Potato: 0.065 L/ha Cauliflower, white cabbage, red cabbage, Savoy cabbage, kohlrabi, salads: 0.06-0.09 L/ha Kidney beans, broad beans, peas, leeks, rocket: 0.09 L/ha Beet root: 0.1-0.125 L/ha Cereals: 0.1-0.125 L/ha Carrots, rutabaga, turnips, celeriac, onions, pumpkin, summer squash, cucumber, asparagus, fennel: 0.125 L/ha Perennial ornamentals: 0.0125 L/ha
Fusilade Max	Fluazifop-P- butyl 125 g/L - EC	4847-00	1 L/ha	<ul style="list-style-type: none"> Winter rape, Sugar beet, beet, fodder peas, potatoes: 1-2 L/ha Summer rape, field beans: 1 L/ha Carrots, sunflower, strawberry: 1.5 L/ha Red fescue: 1.5 L/ha Tree nurseries, conifers, broad-leaves: 4 L/ha Alfalfa, clovers: 1-2 L/ha Stone fruit, almonds, hazelnuts, walnuts, chestnuts, berries: 1-4 L/ha Radish: 1.5 L/ha Hops, chicory, Savoy cabbage, fennel, leguminous vegetables, garlic, horseradish, pastinaca, leeks, beetroot, chicory, salads, rocket, spinach, asparagus, onion, salsify: 1-2 L/ha Celery, celeriac: 1 L/ha Camomile, Melissa, mint: 1 L/ha Herbs: 1 L/ha Soybean 1-2 L/ha Lupin: 1-2 L/ha
Melody Combi	Iprovalicarb 9% + Folpet 56.3% - WG	5215	Seedbeds in glasshouse: 0.2-3.3 g/m ²	<ul style="list-style-type: none"> Grapes (Field): 1.2-2.4 kg/ha
Ortiva	Azoxystrobin 250 g/L - SC	4560	1 L/ha	<ul style="list-style-type: none"> Cucumbers: 0.48-1 L/ha Hops: 0.75-1.6 L/ha Potatoes: 0.5 L/ha Rapeseed, broccoli, cabbage, cauliflower,

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				horseradish: 1 L/ha • Asparagus, celery, fennel, cumin: 1L/ha • Tomatoes, eggplants, peppers, melons: 0.48-0.96 L/ha • Summer squash, pumpkin, cucurbits: 1 L/ha • Salads, rocket, chicory, endive: 1 L/ha • Lupins: 1 L/ha • Kidney beans, broad-beans, horse-beans, runner beans: 1 L/ha • Peas: 1-1.5 L/ha • Strawberries: 1 L/ha • Carrots, parsnips, beetroot, turnips, salsify, Jerusalem artichoke, parsleyroot: 1 L/ha • Garlic, leek, shallots, chives, onions: 1 L/ha • Phacelia: 1 L/ha • Grasses: 1 L/ha • Camomile, calendula, hypericum, mint, plantain: 1 L/ha • Ornamentals: 0.48-0.96 L/ha
Stomp SC	Pendimethalin 400 g/L - SC	3907	4 L/ha	• Wheat, spelt, barley, rye: 2.5-5 L/ha • Maize, sweet corn: 4 L/ha • Peas, kidney-beans and lupins: 2.5-5 L/ha • Soybeans, broad beans: 4 L/ha • Sunflower: 5 l/ha • Onions: 4-5 L/ha • Summer squash, pumpkin, cucumber, melons, cucurbits: 4 L/ha • Salads and endive: 4 L/ha • Horseradish: 4 L/ha • Asparagus, artichoke, fennel, rhubarb: 4 L/ha • Strawberries: 4 L/ha • Red clover, alfalfa: 2.5 L7ha • Grasses: 2.5 L/ha • Dill, cumin, chamomile, Melissa, valeriana, hypericum: 3.5-4 L/ha • Ornamentals: 4-5 L/ha
Italy				•
Aragol L40	Dimetoate 407 g/L - EC	3313	0.1-0.15 L/hL	• Olives: 0.1-0.15 L/hL • Pome fruit: 0.075 L/hL • Cherries: 0.05 L/hL • Citrus fruit: 0.1-0.15 L/hL • Lettuce, asparagus, tomatoes, eggplant: 0.1-0.15 L/hL • Sugar beet: 0.1-0.15 L/hL • Wheat, rye, spelt: 0.1-0.15 L/hL • Poplars: 0.1-0.15 L/hL • Flowers, ornamentals and forestry: 0.1-0.15 L/hL
Bonalan	Benfluralin 180 g/L - EL	2353	6.5-9.5 L/ha	• Lettuce, rocket, peanut: 6.5-9.5 L/ha • Clover, alfalfa: 6.5 L/ha
Brigata FLo	Bifenthrin 20 g/L - SC	8545	0.5-1 L/ha	• Apples, pears: 0.1-0.3 L/hL • Plums, apricots: 0.08-0.3 L/hL • Cherries: 1-2 L/ha • Grapes: 0.1-0.15 L/hL • Citrus fruits: 0.1-0.2 L/hL • Hazelnut, chestnut: 1 L/ha • Carrots, radish, horseradish, celeriac: 1 L/ha • Tomatoes, peppers, eggplants: 0.1-0.2 L/hL • Cucumber, summer squash, melon, watermelon,

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				pumpkin: 0.1-0.2 L/hL • Peas: 0.1-0.2 L/hL • Beans: 0.1-1 L/hL • Lettuce and similar, rocket: 0.1-1 L/hL • Radicchio: 0.1-0.2 L/hL • Wheat: 0.35 L/ha • Maize, sweet corn: 1 L/ha • Strawberry: 0.1-0.3 L/hL • Rapeseed: 0.5-0.75 L/ha • Sugar beet: 0.5-1 L/ha • Cotton: 0.5-4 L/ha • Leek: 0.1-0.15 L/hL • Cabbages: 0.5-1 L/ha • Ornamentals, flowers, nurseries, forestry: 0.1-0.3 L/hL • Vegetables grown for seed: 1-2 L/ha
Challenge	Aclonifen 600 g/L - SC	8184	2.5-3 L/ha	• Carrots, potatoes, tomatoes, peas, sunflower: 2.5 3 L/ha • Maize: 1.5-2 L/ha • Sorghum: 1-1.5 L/ha
Command 36 CS	Clomazone 360 g/L - SC	11649	0.5 L/ha	• Potatoes : 0.25-0.3 L/ha • Carrot : 0.25-3 L/ha • Summer squash: 0.3-0.6 L/ha • Peppers: 0.3-0.6 L/ha • Rice: 0.7-1 L/ha
Confidor 200 SL	Imidacloprid 200 g/L - SL	8987	0.5-1 L/ha	• Pome fruits: 0.05 L/hL • Stone fruits: 0.05 L/hL • Citrus fruit: 0.05-0.075 L/hL • Grapes (nursery) 0.05 L/hL • Tomatoes, eggplants, peppers: 0.75-1 L/ha • Summer squash, cucumber, watermelon, melon: 0.75-1 L/ha • Salads: 0.05 L/hL • Beans, string beans: 0.05 L/hL • Cauliflower, broccoli: 0.05 L/hL • Potatoes: 0.05-0.075 L/hL • Artichokes: 0.05 L/hL • Strawberries: 0.05 L/hL • Alfalfa: 0.05 L/hL • Flowers, ornamentals: 0.05-0.075 L/hL
Contest	Cypermethrin-alpha 14.5% - WG	10373	0.02-0.025 kg/hL	• Potatoes: 0.015-0.03 kg/hL • Tomatoes: 0.015-0.06 kg/hL • Cabbage: 0.015 kg/hL • Beans, lettuce, artichoke: 0.02-0.035 kg/hL • Cucumber: 0.015-0.06 kg/hL • Onion: 0.025-0.03 kg/hL • Rice: 0.025-0.035 kg/hL • Soybeans: 0.035 kg/hL • Maize: 0.025-0.035 kg/hL or 0.3-0.6 kg/ha • Wheat, barley: 0.13-0.2 kg/ha • Peaches: 0.01-0.025 kg/hL • Pears: 0.03-0.06 kg/hL • Apples: 0.015-0.035 kg/hL • Grapes: 0.01-0.015 kg/hL • Citrus: 0.01-0.035 kg/hL • Flowers (field): 0.02-0.06 kg/hL • Poplars: 0.03-0.06 kg/hL
Curzate	Cymoxanil 20% - WP	3553	0.1-0.12 kg/ha	• Artichokes, lettuce, spinaches, tomatoes, summer squash, peas, onions, garlic, leeks, melons, potatoes, roses: 0.1-0.12 kg/ha • Grapes: 0.06-0.07 kg/hL

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
Curzate R	Cymoxanil 4.2% + Copper 39.75% - WP	3532	0.3 kg/hL	<ul style="list-style-type: none"> • Tomatoes, potatoes: 0.3 kg/hL • Grapes: 0.2-0.3 kg/hL
Decis Jet	Deltamethrin 15 g/L - EC	10127	0.5-0.8 L/ha	<ul style="list-style-type: none"> • Apples, pears, peaches, apricots, plums, cherries: 0.05-0.12 L/hL • Grapes: 0.05-0.1 L/hL • Citrus fruits: 0.07-0.1 L/hL • Olives: 0.07-0.1 L/hL • Tomatoes, potatoes, peppers, eggplants, cabbages, carrots, cucumbers, lettuces, rocket, spinaches, asparagus, artichoke, peas, beans, string beans, broad beans, onions, leeks, celery, strawberries: 0.05-0.08 L/hL • Sugar beet: 0.05-0.08 L/hL • Mushrooms: 0.05-0.08 L/hL • Poplars: 0.05-0.3 L/hL • Flowers: 0.08-0.15 L/hL • Nurseries and ornamentals: 0.08 L/hL • Maize, barley, wheat: 0.5-0.8 L/ha • Rapeseed, soybeans: 0.5-0.8 L/ha • Cotton: 0.5 L/ha • Alfalfa: 0.8 L/ha
Dithane DG Neotec	Mancozeb 75% - WG	4552	Seedbeds: 0.1-0.15 kg/hL Field: 0.2 kg/hL	<ul style="list-style-type: none"> • Apples, pears: 0.2 kg/hL • Grapes: 0.2 kg/hL • Tomatoes: 0.2-0.35 kg/hL • Potatoes: 0.2 kg/hL • Walnuts: 0.2 kg/hL • Wheat, barley, oats: 2.5 kg/ha • Poplars: 0.4-0.5 kg/ha • Carnations: 0.2-0.25 kg/hL
Dursban	Chlorpyrifos 480 g/L - EC	3859	0.85-1.1 L/ha	<ul style="list-style-type: none"> • Citrus fruits: 0.11-0.22 L/hL • Apples, pears: 0.85-0.11 L/hL • Grapes: 0.85-0.11L/hL • Peaches: 0.085-0.11 L/hL • Poplars: 0.22 L/hL • Sugar beet, tomatoes, beans, peas, cabbages: 0.85-1.1 L/ha • Soya beans: 0.85-1.2 L/ha • Maize: 0.85-1.7 L/ha • Potatoes: 0.85-1.6 L/ha
Elicio	Fenamidone 4.4% + Fosetyl Aluminium 66.7% - WG	11885	2.3-2.5 kg/ha	<ul style="list-style-type: none"> • Melon: 2.3-2.5 kg/ha • Lettuce: 2-2.5 kg/ha • Grapes: 2.3-2.5 kg/ha
Epik	Acetamiprid 5% - SP	12069	0.1 kg/hL	<ul style="list-style-type: none"> • Pome fruits, stone fruits: 0.1 kg/hL • Tomatoes, potatoes, peppers: 0.1-0.15 kg/hL • Melons: 0.1 kg/hL • Cucumbers (greenhouse): 0.1 kg/hL • Lettuce: 0.1-0.14 kg/ha • Cotton: 0.1 kg/hL • Flowers and ornamentals: 0.1-0.2 kg/hL
Ethrel	Etefon 480 g/L - SL	6437	0.2-0.35 L/hL	<ul style="list-style-type: none"> • Industry tomatoes: 1-4 L/ha • Table tomatoes: 0.2-0.25 L/hL • Apples: 0.04-0.1 L/hL
Etosate 500	Etofumeasate 500 g/L - SC	37269	1.8-2 L/ha	<ul style="list-style-type: none"> • Sugar beet: 1.8-2 L/ha

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
Fusialde Max	Fluazifop-P-butyl 125 g/L - EC	11353	0.75-2 L/ha	<ul style="list-style-type: none"> Citrus fruits, stone fruits, pome fruits, hazelnuts, grapes, olives, lettuces, chicory, artichoke, celery, fennels, cucumbers, peppers, eggplants, carrots, radish, onions, beans, string beans, broad beans, peas, tomatoes, potatoes, sugar beet, sunflower, soya beans, rapeseed, alfalfa: 0.75-2 L/ha
Galben M8-65	Benalaxyl 8% + mancozeb 65% - WP	5756	0.25-0.35 kg/hL	<ul style="list-style-type: none"> Grapes: 0.2-0.25 kg/hL Tomatoes: 0.25-0.3 kg/hL Roses: 0.3 kg/hL
Karate Zeon	Cyhalothrin-Lambda 100 g/L – Suspension in capsules	10944	0.01-0.02 L/hL or 0.1-0.125 L/ha	<ul style="list-style-type: none"> Citrus fruit: 0.01-0.02 L/hL Stone fruit: 0.01-0.04 L/hL Pome fruit: 0.015-0.035 L/hL Hazelnut, almond: 0.02-0.025 L/hL Kiwi, strawberries and other berries: 0.01-0.025 L/hL Grapes: 0.015-0.04 L/hL Garlic, carrots, cauliflower, cabbage, broccoli, Brussels sprouts, artichoke, cucumber, chicory, onion, beans, spring beans, broad beans, fennel, lentils, eggplant, potatoes, peppers, peas, tomatoes, leek, celery, radish, summer squash, rocket, spinaches, Swiss chard: 0.01-0.025 L/hL or 0.1-0.125 L/ha Sugar beet: 0.01-0.025 L/hL or 0.1-0.125 L/ha Wheat, barley, oats, rye, sorghum, maize: 0.015-0.025 L/hL or 0.1-0.15 L/ha Peanuts, rapeseed, cotton, sunflower, soya bean: 0.01-0.03 L/hL or 0.1-0.125 L/ha Hops: 0.015-0.03 L/hL Fodder crops: Fodder beet, alfalfa, maize, lolium, pastures: 0.1-0.125 L/ha Flowers and ornamentals: 0.01-0.03 L/hL or 0.1-0.125 L/ha Nurseries of forest trees: 0.015-0.025 L/hL
Micene MZ	Mancozeb 80% WP	3516	Seedbeds: 0.15-0.2 kg/hL Field: 0.2 kg/hL	<ul style="list-style-type: none"> Apples, pears: 0.15-0.2 kg/hL Grapes: 0.15-0.2 kg/hL Tomatoes: 0.2-0.25 kg/hL Wheat, barley, rye, oats: 2-2.5 kg/ha Poplar: 4 kg/ha Carnation: 0.15-0.2 kg/hL
Nemacur 240 CS	Fenamiphos 240 g/L – Suspension in capsules	11788	25 L/ha	<ul style="list-style-type: none"> Tomatoes, eggplant, peppers, summer squash, cucumbers, melons, watermelons: 42 L/ha
Nurelle 10	Cypermethrin 91 g/L - EL	7675	0.037-0.075 L/hL	<ul style="list-style-type: none"> Peaches: 0.037-0.075 L/hL Pears: 0.037-0.075 L/hL Oranges and lemons: 0.037-0.075 L/hL Poplars: 0.037-0.075 L/hL Grapes: 0.05-0.075 L/hL Flowers and nurseries: 0.037-0.1 L/hL Cabbages, broccoli, cauliflowers, string beans, peas, tomatoes, potatoes, onions: 0.037-0.075 L/hL Maize: 0.037-0.075 L/hL Wheat: 0.037-0.05 L/hL Sugar beet: 0.25-0.6 L/ha
Oikos 25 Plus	Azadirachtine	10303	0.07-0.15 L/hL	<ul style="list-style-type: none"> Lettuce, endive, spinaches, Swiss chard, parsley, basilica, tomatoes, peppers, eggplant, cucumber,

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
	25 g/L - EC			summer squash, melon, cucumber, onions, leeks, celery, fennel, carrots, cabbages, cauliflowers, string beans, kiwi, persimmon, , citrus fruit, strawberry, apples, olives, grapes, sugar beet, cotton, potatoes, flowers and ornamentals: 0.07-0.15 L/hL <ul style="list-style-type: none"> • Mushrooms: 0.75-1.5 L/ha
Oncol 5G Sipcam	Benfuracarb 4.7% - GR	6929	10-12 kg/ha	<ul style="list-style-type: none"> • Strawberries, peppers, tomatoes, eggplants, cucumbers, watermelons, melons, summer squash, pumpkin, carrots, Swiss chard, chicory, celeriac, horseradish, Jerusalem artichoke, radish, turnips, cabbages, cauliflowers, Brussels sprouts, onions, garlic, shallots, spring onions, sugar beet, maize, potatoes, flowers, ornamentals, seedbeds, nurseries: 10-12 kg/ha
Polyram DF	Metiram 71.2% - WG	7916	0.15-0.4 kg/hL	<ul style="list-style-type: none"> • Tomatoes: 1.5-2 kg/ha • Cereals: 2.5-3 kg/ha • Carnations: 0.15-0.2 kg/hL • Apples, pears: 0.15-0.2 kg/hL • Grapes: 0.15-0.4 kg/hL • Poplars: 0.4-0.5 kg/hL
Previcur	Propamocarb-hydrochloride 722 g/L - SC	5881	0.2 L/hL	<ul style="list-style-type: none"> • Tomatoes, peppers, eggplants, watermelon, melon, pumpkin, summer squash, cucumber, salads, spinaches, swiss chard, celery, parsley, basil, cauliflowers, cabbages, carrots, turnips, garlic, onions, leeks, strawberries, flowers and ornamentals : 0.2 L/hL • Apples, pears, lemons, tangerine, grapefruit: 0.2 L/hL
Ridomil Gold MZ Pepite	Mefenoxam 3.9% + Mancozeb 64% - WG	12383	0.3 kg/hL (max 3 kg/ha)	<ul style="list-style-type: none"> • Grapes: 0.25 kg/hL (min 2.5 kg/ha) • Tomatoes: 0.25 kg/hL (2.5-3.5 kg/ha)
Targa Flo	Quizalofop ethyl 50 g/L - SC	6956	1-2.5 L/ha	<ul style="list-style-type: none"> • Garlic, onion, sugar beet, artichoke, carrot, cauliflower, cabbage, rapeseed, sunflower, alfalfa, string beans, peas, soya beans, strawberries, melon, summer squash, spinach, tomatoes: 1-2.5 L/ha
Spain				
Aurusol	Chlorpyrifos 5% - GR	22.083	40-50 kg/ha on the row	<ul style="list-style-type: none"> • Cotton, strawberries, sunflower: 40-50 kg/ha • Maize, potatoes, vegetables (except garlic, sweet potatoes, beet, beetroot, turnip), sugar beet: 40-50 kg/ha on the row
Confidor 20 LS	Imidacloprid 200 g/L - SL	19.120	0.05-0.075 L/hL	<ul style="list-style-type: none"> • Tomatoes, eggplant, peppers, summer squash, pumpkin, cucumber, melon, watermelon, lettuce, beans, cauliflower, broccoli, cabbage, artichoke: 0.05-0.075 L/hL • Citrus fruit: 0.05-0.075 L/hL • Stone fruit, pome fruit: 0.05-0.075 L/hL • Almonds, hazelnuts: 0.05 L/hL • Ornamentals: 0.05-0.075 L/hL • Potatoes: 0.05-0.075 L/hL • Hops: 0.05 L/hL • Grapes: 0.05 L/hL
Decis	Deltamethrin 25 g/L - EC	13.688	0.03-0.05 L/hL (0.3-0.5 L/ha)	<ul style="list-style-type: none"> • Pome fruit, stone fruit, almonds, hazelnuts, figs, walnuts, citrus fruit, olives, grapes, cereals, rapeseed, sunflower, hops, cotton, alfalfa, maize, sugar beet, potatoes, tomatoes, peppers, eggplants, artichokes, melons, watermelons, cucumbers, summer squash, salads, lettuce, spinaches, cabbages, cauliflower, Brussels sprouts, leeks, onion, garlic, leek, beans and peas: 0.03-0.05 L/hL (0.3-0.5 L/ha)

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
Dursban 5 G	Chlorpyrifos 5% - GR	12.541	12-15 kg/ha	<ul style="list-style-type: none"> • Sunflower, strawberry, maize: 10-15 kg/ha • Cotton: 10-12 kg/ha • Potatoes: 40-50 kg/ha according to distance between the rows • Cabbages: 12-15 kg/ha • Asparagus: 25 kg/ha • Onions, beans: 8-10 kg/ha • Tomatoes, peppers: 10-12 kg/ha • Other vegetables (except garlic, sweet potatoes, beet, beetroot, turnip): 8-10 kg/ha
Epik	Acetamiprid 20% - SP	23.377	0.025-0.035 kg/hL	<ul style="list-style-type: none"> • Citrus fruit: 0.025-0.05 kg/hL • Apples, pears peaches, nectarines: 0.025-0.035 kg/hL • Lettuce: 0.025-0.035 kg/hL • Pumpkin: 0.035-0.05 kg/hL • Tomatoes, peppers, eggplants: 0.025-0.05 kg/hL • Cotton: 0.125-0.3 kg/ha
Furadan	Carbofuran 5% - GR	11.553	12-15 kg/ha	<ul style="list-style-type: none"> • Cotton, sunflower, sugar beet: 12-15 kg/ha
Galben M	Benalaxyl 8% + mancozeb 65% WP	16.065	0.25-0.3 kg/hL	<ul style="list-style-type: none"> • Tomato, pepper, eggplant: 0.25-0.3 kg/hL • Potato: 0.3 kg/hL • Onion, lettuce: 0.25-0.3 kg/hL • Melon: 0.25-0.3 kg/hL • Watermelon: 0.2-0.25 kg/ha • Grapes: 0.2-0.25 kg/hL
Mocap G	Etoprophos 10% - GR	17.795	60-80 kg/ha	<ul style="list-style-type: none"> • Pineapple: 60-100 kg/ha • Cabbages, tomatoes, peppers, potatoes, summer squash, cabbages, peanuts, ornamentals: 60-80 kg/ha
Previcur N	Propamocarb hydrochloride 722 g/L - SL	15.049	2-3 L/ha	<ul style="list-style-type: none"> • Strawberries, tomatoes, peppers, eggplants, flowers and ornamentals: 2-3 L/ha • Cucurbits: 0.2-0.3 L/hL
Ridomil MZ Gold	Mefenoxam 4% +ancozeb 64% - WP	22.029	0.2-0.3 kg/hL	<ul style="list-style-type: none"> • Tomatoes, potatoes, onions, lettuce, summer squash, grapes: 0.2-0.3kg g/hL
Rugby 10ME	Cadusafos 10% - ME	18.643	20-40 L/ha	<ul style="list-style-type: none"> • Eggplant, melon and watermelon: 20-40 L/ha • Summer squash, cucumber: 20-40 L/ha • Citrus fruit: 20-40 L/ha • Beans: 20-40 L/ha • Tomatoes, peppers: 20-40 L/ha • Potatoes: 40-60 L/ha • Bananas: 20-40 ml/plant
Tender	Etofumesate 500 g/l - SC	19.932	2-3 L/ha	<ul style="list-style-type: none"> • Sugar beet: 1-4 L/ha
Tramat 50 SC	Etofumesate 50% - SC	15.310	2-3 L/ha	<ul style="list-style-type: none"> • Sugar beet: 1-4 L/ha
USA				
Acephate 75SP	Acephate 75% - SP	70506-1-53883	Seedbed and float bed: 1 lb/A Field: 0.33- 1 lb/A (max 1	<ul style="list-style-type: none"> • Beans and lime beans: 0.33-1.33 lb/A (max 2.66 lb/A/season) • Celery: 0.66-1.33 Lb/A (max 2.66 lb/A/season) • Brussels sprouts, cauliflowers: 0.66-1.33 lb/A (max 2.66 lb/A/season) • Cotton: 3 oz-1.33 lb/A (max 8 lb/A/season)

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
			lb/A/season)	<ul style="list-style-type: none"> • Cranberries: 1.33 lb/A (max 1.33 lb/A/season) • Head lettuce: 0.66-1.33 lb/A (max 2.66 lb/A/season) • Mint: 1.33 lb/A (max 2.66 lb/A/season) • Citrus fruit, non bearing: 0.66-1 lb/A • Non crop areas: 0.125-0.33 lb/A/year • Peanuts: 0.33-1.33 lb/A (max 5.33 lb/A/season) • Bell peppers 0.33-1.33 lb/A (max 2.66 lb/A/season) • Non-bell peppers: 0.66 lb/A (max 1.33 lb/A/season) • Trees and shrubs: 0.33-1.33 lb/A • Turfgrass: 1.33-6.66 lb/A • Floral crops: 0.33-1.33 lb/A
Acrobat 50WP	Dimetomorph 50% - WP	241-410	2-8 oz/A (max 32 oz/A/season)	<ul style="list-style-type: none"> • Bulb vegetables, cucurbit vegetables, fruiting vegetables, leafy brassica greens, hops, lettuce, taro: 6.4 oz/A (max 32 oz/A/season) • Potato: 4-6.4 oz/A (max 32 oz/A/season)
Actara	Thiamethoxam 25% - WG	100-938	2-3 oz/A (max 3 oz/A/season)	<ul style="list-style-type: none"> • Barley: 4 oz/A (max 8 oz/A/season) • Bushberry, juneberry, lingonberry, salal 3-4 oz/A (max 12 oz/A/season) • Caneberry: 2-3 oz/A (max 6 oz/A/season) • Brassica, cucurbit vegetables, leafy vegetables: 1.5-5.5 oz/A (max 11 oz/A/season) • Citrus fruit: 3-5.5 oz/A (max 11 oz/A/season) • Cranberry: 2-4 oz/A (max 12 oz/A/season) • Fruiting vegetables: 2-5.5 oz/A (max 11 oz/A/season) • Globe artichoke: 3 oz/A (max 6 oz/A/season) • Grapes: 1.5-3.5 oz/A (max 7 oz A/season) • Mint: 1.5-4 oz/A (max 12 oz/A/season) • Pome fruit: 2-5.5 oz/A (max 16.5 oz/A/season) • Radish: 1.5-4 oz/A (max 4 oz/A/season) • Root vegetables except radish: 1.5-4 oz/A (max 8 oz/A/season) • Strawberry: 1.5-4 oz/A (max 12 oz/A/season) • Tuberos and corm vegetables: 1.5-3 oz/A (max 6 oz/A/season)
Actigard 50WG	Acibenzolar-S-methyl 50%-WG	100-922	0.5 oz/A (max 3 applications, 1.5 oz/A/season)	<ul style="list-style-type: none"> • Chili pepper: 0.33-0.75 oz/A (max 6 applications) • Cole: 1 oz/A (max 4 applications, 4 oz/A/season) • Lettuce : 0.75-1 oz/A (max 4 applications) • Spinach : 0.75 oz/A (max 3 applications)
Admire Pro Systemic Protectant	Imidacloprid 550 g/L - SC	264-827	Seedbeds: 0.5 1.2 Oz/1000 plants Field: 0.6-1.2 oz/1000 plants (max 14 oz/A/season)	<ul style="list-style-type: none"> • Cotton: 7.4-9.2 oz/A (max 9.2 oz/A/season) • Peanut: 7-10.5 oz/A (max 10.5 oz/A/season) • Potato: 5.7-8.7 oz/A (max 8.7 oz/A/season) • Cucurbit vegetable: 7-10.5 Oz/A (max 10.5 oz/A/season) • Eggplant, ground cherry, tomato, pepino, tomatillo: 7-10.5 oz/A (max 10.5 oz/A/season) • Herbs: 7-10.5 oz/A (max 10.5 oz/A/season) • Okra, pepper, artichoke: 7-14 oz/A (max 14 oz/A/season) • Broccoli, broccoli raab, Brussels sprouts, cabbage, cauliflower, cavolo broccoli, chinese broccoli, chinese cabbage, Chinese mustard cabbage, collards, kale, kohlrabi, mizua, mustard greens, mustard spinach, rape greens: 4.4-10.5 oz/A (max 10.5 oz/A/season) • Leafy vegetables: 4.4-10.5 oz/A (max 10.5 oz/A/season) Cardoon, celery, celtuce, Chinese celery, Florence fennel, rhubarb, Swiss chard: 4.4-10.5 oz/A (max 10.5 oz/A/season) • Peas and beans (except soy bean): 7-10.5 oz/A (max 10.5 oz/A/season) • Root vegetables: 4.4-10.5 (max 10.5 oz/A/season)

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Tuberos and corm vegetables: 4.4-10.5 oz/A (max 10.5 oz/A/season) • Strawberry: 10.5-14 oz/A (max 14 oz/A/season) • Sugar beet: 2.6-5.2 oz/A (max 5.2 oz/A/season) • Banana, plantain: 7-14 oz/A (max 14 oz/A/season) • Bushberry: 7-14 oz/A (max 14 oz/A/season) • Caneberry: 7-14 oz/A (max 14 oz/A/season) • Citrus (field): 7-14 oz/A (max 14 oz/A/season) • Coffee: 7-14 oz/A (max 14 oz/A/season) • Cranberry: 7-14 oz/A (max 14 oz/A/season) • Grapes: 7-14 oz/A (max 14 oz/A/season) • Hops: 2.8-8.4 oz/A (max 8.4 oz/A/season) • Pome fruit: 7-10.5 oz/A (max 10.5 oz/A/season) • Pomegranate: 7-14 oz/A (max 14 oz/A/season) • Stone fruit: 7-10.5 oz/A (max 10.5 oz/A/season) • Tree nuts: 7-14 oz/A (max 14 oz/A/season) • Tropical fruit: 10.5-14 oz/A (max 14 oz/A/season) • Christmas tree: 7-14 oz/A (max 14 oz/A/season) • Poplar: 7-14 oz/A (max 14 oz/A/season)
Aliette WDG	Fosetyl AI 80% - WG	264-516	Seedbeds: 0.5 lb/50 gal, max 2 applications/season Field: 2.5-4 lb/A, max 5 applications/season	<ul style="list-style-type: none"> • Avocado, bearing: 5 lb/A (1 lb/100 gal), max 20 lb/A/season • Citrus, bearing: 5 lb/A (1 lb/100 gal), max 20 lb/A/season • Macadamia nuts: 7.5 lb/A, max 30 lb/A/season • Pome fruit, bearing: 2.5-5 lb/A (0.5-1 lb/100 gal), max 20 lb/A/year • Stone fruit and almonds, non-bearing: 3.5-5 lb/100 gal, max 20 lb/A/season • Blueberry: 5 lb/A, max 20 lb/A/season • Caneberry: 5 lb/A, max 20 lb/A/season • Cranberry: 5 lb/A, max 20 lb/A/season • Grapes: 3-5 lb/A, max 7 applications/season • Strawberry: 2.5-5 lb/A, max 30 lb/A/season • Asparagus: 5 lb/A • Cole crops: 2-5 lb/A, max 7 applications/season • Cucurbit vegetables: : 2-5 lb/A, max 7 applications/season • Leafy vegetables, except coles: : 2-5 lb/A, max 7 applications/season • Onions, dry bulb: 2-3 lb/A, max 7 applications/season • Tomato: 2.5-5 lb/A, max 20 lb/a/season • Banana: 6 lb/A, max 4 applications/season • Ginseng: 5 lb/100 gal, max 9 applications/season • Hops: 2.5 lb/A, max 10 lb/A/season • Pineapple: 3.75 lb/100 gal, max 6 application/season
Ag Streptomycin	Streptomycin sulfate 22.4%	66222-121	100-200 ppm	<ul style="list-style-type: none"> • Apples, pears: 50-100 ppm • Celery: 200 ppm • Chrysanthemum: 50 ppm • Diffenbachia cuttings: 100-200 ppm • Peppers: 200 ppm • Philodendron: 200 ppm • Potatoes: 100 ppm • Roses: 50-200 ppm • Tomatoes: 200 ppm
Assail 70WP	Acetamiprid 70% - WP	8033-23-82695	0.6-17 oz/A, max 6.8 oz/A/season	<ul style="list-style-type: none"> • Cotton: 0.6-2.3 oz/A, max 9.2 oz/A/season • Leafy vegetables: 0.8-1.7 oz/A, max 8.5 oz/A/season • Cole crops: 0.8-1.7 oz/A, max 8.5 oz/A/season • Eggplant, pepino, pepper, tomato, tomatillo: 0.6-1.7 oz/A, max 6.8 oz/A/season • Citrus fruit: 1.1-5.7 oz/A, max 12.5 oz/A/season

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Pome fruit: 1.1-3.4 oz/A, max 13.5 oz/A/season • Stone fruit: 1.1-3.4 oz/A, max 13.6 oz/A/season • Tree nuts: 1.1-4.1 oz/A, max 16.4 oz/A/season • Grapes: 1.1 oz/A, max 2.3 oz/A/season • Tuberous and corm vegetables: 0.6-1.7 oz/A, max 7 oz/A/season • Edible podded legume vegetables: 1-2.3 oz/A, max 6.9 oz/A/season • Strawberries and other low growing berries: 0.8-3 oz/A, max 6 oz/A/season • Blueberries and other bush/cane berries: 1-2.3 oz/A, max 11.4 oz/A/season • Onions and other bulb vegetables: 2.1-3.4 oz/A, max 13.7 oz/A/season
Belay 16 WSG Insecticide	Chlothianidin 16% - WG	59639-153	5-10 oz/A, max 0.2 lb/A/season	<ul style="list-style-type: none"> • Potato: 12-18 oz/A, max 18 oz/A/season
Butralin Sucker Control	Butralin 360 g/L -	33688-4-400	2-4 quarts/50 gals water	
Capture LFR	Bifenthrin 180 g/L -	279-3302	Tobacco: 3.4-85 oz/A, max 0.2 lb a.i./A/season	<ul style="list-style-type: none"> • Maize: 3.4-8.5 oz/A, max 0.3 lb a.i./A/season • Succulent peas and beans: 3.4-6.8 oz/A, max 0.2 lb a.i./A/ season • Dried beans and peas: 3.4-6.8 oz/A, , max 0.3 lb a.i./A/ season • Coles: 3.4-6.8 oz/A,, max 0.5 lb a.i./A/ season • Leafy brassicas : 3.4-6.8 oz/A, max 0.4 lb a.i./A/ season • Cucurbits: 3.4-6.8 oz/A, max 0.3 lb a.i./A/ season • Lettuce : 3.4-6.8 oz/A, max 0.5 lb a.i./A/ season • Eggplant: 3.4-6.8 oz/A, max 0.2 lb a.i./A/ season • Peppers: 3.4-6.8 oz/A, max 0.2 lb a.i./A/ season • Tomatoes: 3.4-6.8 oz/A, max 0.32 lb a.i./A/ season • Spinach: 3.4-6.8 oz/A, max 0.4 lb a.i./A/ season • Okra: 3.4-6.8 oz/A, max 0.2 lb a.i./A/ season • Coriander: 3.4-6.8 oz/A, max 0.5 lb a.i./A/ season • Tuberous and corm vegetables: max 0.2 lb a.i./A/ season
Chlorpyrifos 4E AG	Chlorpyrifos 4 lb/gal- EC	51036-291	2-5 qt/A, max 1 application/year	<ul style="list-style-type: none"> • Alfalfa: 0.5-2 pints/A, max 4 applications/year • Asparagus: 2 pints/A, max 1 pre- and post-harvest applications/year • Cherries: 1.5-3 quarts/100 gal water, max 3 applications/year • Christmas trees: 1 qt/A • Citrus fruit: 2-12 pints/A, max 2 applications/year • Cranberries: 3 pints/A, max 2 applications/year • Maize: 1-6 pints/A, max 15 pint/A/year • Sweet corn: 1-2 pints/A, max 22 pints/A/year • Cotton: 0.37-2 pints/A, max 3 applications/year • Figs: 2 qt/A, max 1 application/season • Grapes: 4.5 pints/100 gals water, max 1 application/year • Mint: 2-4 pints/A, max 1 application/year • Nectarines, peaches: 3 qt/100 gal water, max 1 application/season • Peanuts: 4 pints/A, max 1 application/year • Sorghum: 0.5-2 pints/A, max 3 applications/season • Soy beans: 0.5-2 pints/A, max 3 applications/year • Strawberries: 1 qt/A, max 2 applications/year • Sunflowers: 1-4 pints/A, max 3 applications/Season

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Sugar beets: 0.5-2 pints/A, max 3 applications/year • Sweet potatoes: 4 pints/a, max 1 application/year • Apples, pears, plums, peaches, nectarines: 0.5-1 pint/100 gal water, max1 application/season • Almonds, hazelnuts, walnuts: 3-4 pints/A, max 3 applications/year • Pecans: 1-4 pints/A, max 2 applications/year • Brussels sprouts: 1-2 pints/A (max 6 applications/season) • Radishes: 5.5 pints/A in 1 application/year • Rutabagas: 4.5 pints/A in 1 application/year • Wheat 1 pint/A, max 2 applications/year
Command 3ME	Clomazone 3 pounds/gallon - microencapsulated	279-3158	2-2.67 pints/A	<ul style="list-style-type: none"> • Rice: 1.125-1.60 pints/A (max 1.60 pints/A/season) • Soy beans: 1.3-3.3 pints/A • Sugarcane: 2.3-3.3 pints/A • Succulent beans: 0.4-0.67 pints/A • Cabbage: 0.67-1.3 pints/A • Cucumbers: 0.4-1 pints/a • Melons: 0.4-0.67 pints/A • Succulent peas: 1.3 pints/ • Peppers: 0.67-2.67 pints/A • Squash: 0.67-2 pints/A • Sweet potatoes: 1.3-4 pints/A • Tuberous and corm vegetables: 2-3.3 pints/A • Mint: 1.3 pint/A
Denim	Emamectin benzoate 0.16 lb/gal -	100-903	Tobacco: 6-12 fl oz/A (max 36 fl oz/A/season)	<ul style="list-style-type: none"> • Cotton: 6-12 fl oz/A (max 48 fl oz/A/ season)
Devrinol 2-EC	Napropamide 2lb/gal - EC	70506-64	Tobacco: 0.5-1 gal/A	<ul style="list-style-type: none"> • Strawberries: 2 gals/A • Tomatoes, peppers: 0.5-1 gal/A
Devrinol 50-DF	Napropamide 50% - DF	70506-36	Tobacco: 2-4 lb/A	<ul style="list-style-type: none"> • Almonds, filberts, grapes, kiwi, pecans, persimmon, berries, rhubarb, strawberries, asparagus: 8 lb/A • Cole crops: 1-4 lb/A • Eggplants, peppers, tomatoes: 2-4 lb/A • Sweet potatoes: 2-4 lb/A
Dithane DF Rainshield	Mancozeb 75% - DF	62719-402	Conventional outdoor seedbed: 1 lb/100 gal water Greenhouse and float-bed system: 0.5 lb/100 gal water Field: 1.5-2 lb/A	<ul style="list-style-type: none"> • Pome fruits: 3.2-6.4 lb/A (max 25.6 lb/A/year) • Bananas, plantains: 2-3 lb/A (max 32 lb/A/cycle) • Cranberries: 3-6 lb/A (max 19.2 lb/A/season) • Grapes: 1.5-4 lb/A (max 25.6 lb/A/year) • Papayas: 2-2.5 lb/A (max 37.3 lb/A/cycle) • Asparagus: 2 lb/A (max 8.5 lb/A/season) • Corn: 1.5 lb/A (max 24 lb/a/year) • Cucumbers, melons, squash, watermelon: 2-3 lb/A (max 25.6 lb/A/crop) • Fennel 2 lb/A (max 17 lb/A/season) • Onions, garlic, shallot: 3 lb/A (max 32 lb/A/crop) • Potatoes: 0.5-2 lb/A (max 11.2 lb/A) • Tomatoes: 1.5-3 lb/A (max 22.4 lb/A/crop) • Barley: 1.5 lb/A (max 16 lb/A/season) • Wheat, triticale, oats, rye: 2.1 lb/A (max 3 applications/season) • Peanuts: 1-2 lb/A (max 17 lb/A/crop) • Sugar beets: 1.5-2 lb/A (max 15 lb/A/season) • Asparagus crowns: 1lb/100 gal • Caprifig: 1 lb/25 gal • Christmas trees, Douglas fir: 2.13-4.27 lb/A • Turf: 4 oz/100 sq ft

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
Endosulfan 3EC	Endosulfan 3 lb/gal - EC	19713-399	Seed bed, plant bed: 0.66 qt/100 gal Field: 0.66-1.33 qt/A (max 2.66 qt/A/season)	<ul style="list-style-type: none"> • Almonds: 2.66 qt/A (max 1 appl./year) • Apples: 0.66 qt/100 gal (max 3.33 qt/A/season) • Peaches, nectarines, apricots: 0.66-3.33 qt/100 gals (max 3.33 qt/A/season) • Beans, peas: 0.66-1.33 qt/A • Blueberries: 2 qt/A (max 2 qt/A/season) • Broccoli, Brussels sprouts, Cabbage, cauliflower: 1-1.33 qt/A (max 2.66 qt/A/season) • Carrots: 0.66-1.33 qt/A (max 1 appl/season) • Celery: 0.66-1.33 qt/A (max 1.33 qt/A/season) • Cherries: 0.66-1.33 qt/100 gals or 2.66-3.33 qt/A (max 3.33 qt/A/season) • Collards: 1-1.33 qt/A (max 1.33 qt/A/season) • Cotton: 0.5-2 qt/A (max 2.66 qt/A/season) • Cucumbers, melons, pumpkins, summer and winter squash: 0.66-1.33 qt/A (max 2.66 qt/A/season) • Eggplant: 0.66-1.33 qt/A (max 1.33 qt/A/season) • Kale: 1 qt/A (max 1 qt/A/season) • Lettuce: 1-1.33 qt/A (max 2.66 qt/A/season) • Mustard greens: 1-1.33 qt/A (max 1 qt/A/season) • Pears: 0.33-0.66 qt/100 gal or 2.66-3.33 qt/A (max 3.33 qt/A/season) • Peppers: 0.66-1.33 qt/A (max 2.66 qt/A/season) • Pineapple: 2-2.66 qt/A (max 4 qt/A/season) • Plums, prunes: 0.66 qt/100 gal, or 2.66-3.33 qt/A (max 3.33 qt/A/season) • Potatoes: 0.66-1.33 qt/A (max 2.66 qt/A/season) • Strawberries: 1.33 qt/A (max 2.66 qt/A/season) • Sweet corn: 1.33-2 qt/A (max 2 qt/A/season) • Sweet potatoes: 0.66-2.66 qt/A (max 2.66 qt/A/season) • Tomatoes: 0.66-1.33 qt/A (max 4 app./season or 2.66 qt/A/season) • Ornamentals: 0.6-1.33 qt/100 gal
Ferbam Granuflo	Ferbam 76% - DF	45728-7	Plant beds: 2-3 lb/100 gal (3-6 gal spray/100 sq yards)	<ul style="list-style-type: none"> • Apples: 3-8 lb/A • Cherries: 4.5 lb/A • Citrus: 15-26 lb/A • Cranberries: 6 lb/A (0.09 lb sq ft) • Grapes: 4 lbs/A • Peaches, nectarines: 4.5 lb/A • Pears: 4-6 lb/A • Confiers: 1-2 lb/100 gal • Oramentals: 1-3 lb/100 gal
Fulfill	Pymetrozine: 50% - WG	100-912	2.75 oz/A (max 5.5 oz/A)	<ul style="list-style-type: none"> • Cotton: 2.75 oz/A (max 5.5 oz/A) • Potatoes and other tuberous root and corm vegetables: 2.75-5.55 oz/A (max 11/A/season) • Asparagus: 2.75 oz/A (max 16.5 oz/A/season) • Cole crops: 2.75 oz/A (max 5.5 oz/A/season) • Cucurbit vegetables: 2.75 oz/A (max 5.5 oz/A/season) • Fruiting vegetables: 2.75 oz/A (max 5.5 oz/A/season) • Leafy vegetables: 2.75 oz/A (max 5.5 oz/A/season) • Hops: 4-6 oz/A (max 18 oz/A/season) • Pecan: 4 oz/A (max 8 oz/A/season)
Lannate LV	Methomyl 2.4 lb/gal – Water soluble liquid	352-384	0.75-1.5 pt/A (max 7.5 pt/A/crop)	<ul style="list-style-type: none"> • Alfalfa: 0.75-3 pt/A (max 12 pt/A/crop) • Anise: 1.5-3 pt/A (max 15 pt/A/crop) • Apple: 1.5-3 pt/A (max 15 pt/A/crop) • Asparagus: 1.5-3 pt/A (max 15 pt/A/crop) • Avocado: 1.5-3 pt/A/ (max 3 pt/A/crop) • Barley: 0.75-1.5 pt/A/ (max 6 pt/A/crop) • Beans, dry and succulent: 0.75-3 pt/A (max 15

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<p>pt/A/crop)</p> <ul style="list-style-type: none"> • Beets: 0.75-3 pt/A (max 12 pt/A/crop) • Bermudagrass pastures: 0.75-3 pt/A (max 3 pt/A/crop) • Blueberries: 0.75-3 pt/A (max 12 pt/A/crop) • Broccoli: 0.75-3 pt/A (max 21 pt/A/crop) • Brussels sprout: 1.5-3 pt/A (1.5-3 pt/A/season) • Cabbage: 0.75-3 pt/A (max 24 pt/A/crop) • Carrot: 0.75-3 pt/A (max 21 pt/A/crop) • Cauliflower: 0.75-3 pt/A (max 24 pt/A/crop) • Celery: 0.75-3 pt/A (max 24 pt/A/crop) • Chicory: 1.5-3 pt/A (max 24 pt/A/crop) • Chinese cabbage: 1.5-3 pt/A/ (max 24 pt/A/crop) • Collards: 1.5-3 pt (max 18 pt/A/crop) • Corn (0.75-1.5 pt/A (max 7.5 pt/A/crop) • Sweet corn: 0.75 1.5 pt/A (max 21 pt/A/crop) • Cotton : 0.4-2.25 pt/A (max 6 pt/A/crop) • Cucumber: 1.5-3 pt/A (max 18 pt/A/crop) • Eggplant: 0.75-3 pt/A (max 15 pt/A/crop) • Endive: 1.5-3 pt/A (max 15 pt/A/crop) • Garlic: 1.5 pt/A (max 9 pt/A/crop) • Grapefruit : 1.5-3 pt/A/ max 9 pt/A/crop) • Grapes: 1.5-3 pt/A/ (max 15 pt/A/ crop) • Horseradish: 1.5 pt/A (max 6 pt/A/crop) • Leafy greens: 1.5-3 pt/A (max 12 pt/A/crop) • Lemon: 1.5-3 pt/A (max 9 pt/A/crop) • Lentils 1.5-3 pt/A (max 3 pt/A/crop) • Lettuce : 0.75-3 pt/A (max 24 pt/A/crop) • Melons : 1.5-3 pt/A (18 pt/A/crop) • Mint : 2.25-3 pt/A (max 6 pt/A/crop) • Nectarines : 1.5-3 pt/A (max 9 pt/A/crop) • Oats : 0.75-1.5 pt/A (max 6 pt/A/crop) • Onions : 1.5-3 pt/A (max 18 pt/A/crop) • Oranges : 1.5-3 pt/A (max 9 pt/A/crop) • Peaches : 3 pt/A (max 18 pt/A/crop) • Peanuts: 0.75-3 pt/A (max 12 pt/A/crop) • Pears: 1.5-3 pt/A (max 6 pt/A/crop) • Peas: 0.75-3 pt/A (max 9 pt/A/crop) • Pecans: 1.5-3 pt/A (max 21 pt/A/crop) • Peppers: 0.75-3 pt/A (max 15 pt/A/crop) • Pomegranates : 3 pt/A/ (max 6 pt/A/crop) • Potatoes: 1.5-3 pt/A (max 15/A/crop) • Rye: 0.75-1.5 pt/A (max 6 pt/A/crop) • Sorghum: 0.75-1.5 pt/A (max 3 pt/A/crop) • Soy beans: 0.4-1.5 pt/A (max 4.5 pt/A/crop) • Spinach: 1.5-3 pt/A (max 12 pt/A/crop) • Sugar beet: 0.75-3 pt/A (max 15 pt/A/crop) • Summer squash: 1.5-3 pt/A (max 18 pt/A/crop) • Tangerine: 1.5-3 pt/A (max 9 pt/A/crop) • Tomato: 1.5-3 pt/A (max 21 pt/A/crop) • Sod farm turf: 3 pt/A (max 12 pt/A/crop) • Wheat: 0.75-1.5 pt/A (max 6 pt/A/crop)
Lorsban 4E	Chlorpyrifos 4 lb/gal EC	62719-220	2 pt/A (max 1 appl./season)	<ul style="list-style-type: none"> • Alfalfa: 0.5-2 pt/A (max 4 appl./season) • Asparagus: 2 pt/A (max 1 pre- or 2 post-harvest appl./season) • Christmas trees: 1 qt/A (max 3 appl./season) • Citrus fruit: 2-12 pt/A (max 2 appl./season) • Citrus orchard floors: 1.5-2 pt/A (max 3 app./season) • Brassica leafy vegetables: 2.6 pt/A on 40-inch row (max 1 appl./season)

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				<ul style="list-style-type: none"> • Rutabaga: 4.5 pt/A (max 1 appl./season) • Turnip: 2.6 pt/A on 40-inch row (max 1 appl./season) • Radish: 5.5 pt/A (max 1 appl./season) • Corn: 0.5-2 pt/A (max 3 appl./season) • Cotton: 0.475-2 pt/A (max 3 appl./season) • Cranberry: 3 pt/A (max 2 appl./season) • Fig: 2 qt/A (max 1 appl./season) • Grapes: 4.5 pt/100 gal, or 1 qt/A max 1 appl./season) • Legume vegetables: 2 pt/A (max 1 appl./season) • Mint: 2-4 pt/A (max 1 appl./season) • Onion dry bulb: 1 qt/A (max 1 appl./season) • Orchard floors: 4-8 pt/A (max 2 appl./season, or 8 pt/A/season) • Peanut: 4 pt/A (max 1 appl./season) • Sorghum: 0.5-2 pt/A (max 3 appl./season) • Soy beans: 1-2 pt/A (max 3 appl./season) • Strawberry: 1-2 qt/A (max 2 appl./year) • Sugar beet: 0.5-2 pt/A (max 3 appl./season or 6pt/A) • Sunflower: 1-4 pt/A (max 3 appl./season or 6 pt/A/season) • Sweet potato: 4 pt/A (max 1 appl./season) • Tree fruits and tree nuts: 0.5-4 pt/A (max 3 appl./season or 8 pt/A/season) • Turfgrass: 2-8 pt/A (max 2 appl./season) • Wheat: 0.5-1 pt/A (max 2 apps./season)
Mocap 15% Granular Lock'n Load	Ethoprop 15% GR	264-457	Field: 13-40 lb/A (max 1 appl./season) Row: 3.2 lb/1,000 ft row (max 1 appl./season)	<ul style="list-style-type: none"> • Banana, plantain: 1.3 oz/stem • Beans: 40-54 lb/A (max 1 appl./season) • Cabbage: 34 lb/A (max 1 appl./season) • Corn: 6.6-40 lb/A (max 1 appl./season) • Cucumber: 2.1 lb/1,000 ft row (max 1 appl./season) • Potatoes: 27-80 lb/A (max 1 appl./season) • Sugar cane: 1.8-3.6 lb/1,000 ft row (max 1 appl./season) • Sweet potato: 1.6-2.1 lb/1,000 ft row(max 1 appl./season)
Nemacur 3 Emulsifiable Systemic	Fenamiphos 3 lb/gal EC	264-731	1-2 gal/A (max 2 gal/A/season or 1 appl./season)	<ul style="list-style-type: none"> • Peanuts: 2-3.3 qt/A on 36-inch rows (max 3.3 qt/A/season or 1 appl./season) • Apple, cherry, nectarine, peach: 1.66-2.5 gal/A (max 2.5 gal/A/season) • Grape: 1-2 gal/A (max 2 gal/A/season) • Kiwi: 2 qt-1 gal/A (max 2 gal/A/year) • Citrus: 1.66-2.5 gal/A (max 2 gal/A/season) • Pineapple: 43-86 fl oz/A (max 4 gal/A/season) • Raspberry: 1-2 gal/A (max 1 appl./season) • Strawberry: 5.9-8.8 fl oz for any row spacing (max 6 qt/A/season, 1 appl./season) • Banana: 2.2-6.66 qt/A (max 18 qt/A/season) • Asparagus: 5.33 pt/A (max 5.33 pt/A/season, or 1 appl./season) • Eggplant: 2.66 qt/A on 36-inch row (max 2.66 qt/A/season or 1 appl./season) • Table beets: 4-6 fl oz/1,000 ft row (max 2.25 qt/A)
Pendimax 3.3	Pendimethalin 3.3 lb/gal	68156-6-62719	1.2-3.6 pt/A	<ul style="list-style-type: none"> • Field corn: 1.2-4.8 pt/A • Sweet corn, seed corn, popcorn: 1.8-4.8 pt/A • Cotton: 1.2-4.8 pt/A • Edible beans and peas: 1.2-3.6 pt/A • Forage legumes: 1.2-3 pt/A • Garlic, shallot, onion: 1.2-4.8 pt/A • Sorghum: 1.2-3.6 pt/A • Non-bearing fruit and nut crops and vineyards: 2.4-4.8

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				qt/A <ul style="list-style-type: none"> • Peanuts: 1.2-2.4 pt/A • Potatoes: 1.2-3.6 pt/A • Rice: 1.8-2.4 pt/A • Soy beans: 1.2-3.6 pt/A • Sugar cane: 2.4-4.8 pt/A • Sunflowers: 1.2-4.2 pt/A
Poast	Sethoxydim 1.5 lb/gal	7969-58	1.5 pt/A (max 4 pt/A/season)	<ul style="list-style-type: none"> • Alfalfa, trefoil, sainfoin: 2.5 pt/A (max 6.5 pt/A/season) • Apricot: 2.5 pt/A (max 5 pt/A/season) • Artichoke: 2.5 pt/A (max 5 pt/A/season) • Asparagus: 2.5 pt/A (max 5 pt/A/season) • Avocado, non-bearing: 2.5 pt/A (max 7.5.pt/A/season) • Beans and peas: 2.5 pt/A (max 4 pt/A/season) • Beet: 2.5 pt/A (max 5 pt/A/season) • Blueberry: 2.5 pt/A (max 5 pt/A/season) • Brassica vegetables: 1.5 pt/A (max 3 pt/A/season) • Bulb vegetables: 1.5 pt/A (4.5 pt/A/season) • Caneberries: 2.5 pt/A (max 5 pt/A/season) • Canola: 2.5 pt/A (max 5 pt/A/season) • Carrot: 2.5 pt/A (max 5 pt/A/season) • Cherries: 2.5 pt/A (max 5 pt/A/season) • Citrus: 2.5 pt/A (max 10 pt/A/season) • Clover: 2.5 pt/A (max 6.5 pt/A/season) • Corn: 1.5-3 pt/A (max 3 pt/A/season) • Cotton: 2.5pt/A (max 7.5 pt/A/season) • Cranberry: 2.5 pt/A (max 5 pt/A/season) • Cucurbits: 1.5 pt/A/ (max 3 pt/A/season) • Date, non-bearing: 2.5 pt/A (max 7.5 pt/A/season) • Deciduous trees, non food crops ares, fallow land: 2.5 pt/A • Fig, non-bearing: 2.5 pt/A (max 7.5 pt/A/season) • Flax: 1.5 pt/A (4 pt/A/season) • Fruiting vegetables: 1.5 pt/A (max 4.5 pt/A/season) • Grape: 2.5 pt/A (max 5 pt/A/season) • Head and petiole type vegetables: 1.5 pt/A (max 3 pt/A/season) • Horseradish: 2.5 pt/A (max 5 pt/A/season) • Leafy vegetables: 1.5 pt/A (max 3 pt/A/season) • Lentil: 2.5 pt/A/ (max 4 pt/A/season) • Mint: 2.5 pt/A (max 5 pt/A/season) • Nectarine: 2.5 pt/A (max 5 pt/A/season) • Olives, non bearing: 2.5 pt/A (max 7.5 pt/A/season) • Orchard floor middles: 0.5 pt/A (max 0.5 pt/A/season) • Peach: 2.5 pt/A (max 5 pt/A/season) • Peanut: 1.5 pt/A/ (max 2.5 pt/A/season) • Pistacho: 2.5 pt/A (max 10 pt/A/season) • Plum, non-bearing: 2.5 pt/A (max 7.5 pt/A/season) • Pome fruit: 2.5 pt/A (max 7.5 pt/A/season) • Pomegranate: 2.5 pt/A (max 7.5 pt/A/season) • Potatoes: 2.5 pt/A (max 5 pt/A/season) • Sweet potatoes: 1.5-2.5 pt/A (max 5 pt/A/season) • Prune, non-bearing: 2.5 pt/A (max 7.5 pt/A/season) • Tuberous and corm vegetables: 2.5 pt/A (max 5 pt/A/season) • Seta aside conservation land: 2.5 pt/A (max 7.5 pt/A/season) • Soy beans: 2.5 pt/A (max 5 pt/A/season) • Strawberry: 2.5 pt/A (max 2.5 pt/A/season) • Sugar beet: 2.5 pt/A (max 5 pt/A/season) • Sunflower: 2.5 pt/A (max 2.5 pt/A/season)

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				<ul style="list-style-type: none"> • Tree nuts: 2.5 pt/A (max 10 pt/A/season)
Prime + EC	Flumetralin: 1.2 lb/gal	100-640	1 gal/49 gal water	
Quadris Flowable Fungicide	Azoxystrobin 2.08 lb/gal EW	100-1098	6-12 fl oz/A (max 0.52 lb a.i./A/season)	<ul style="list-style-type: none"> • Artichoke: 11-15.5 fl oz/A (max 1.5 lb a.i./A/season) • Asparagus: 6-15.5 fl oz/A (max 1.5 lb a.i./A/season) • Barley: 6-12 fl oz/A (max 0.4 lb a.i./A/season) • Brassica head and stem subgroup: 6-15.5 fl oz/A (max 1.5 lb a.i./A/season) • Brassica leafy greens subgroup: 6-15.5 fl oz/A (max 0.75 lb a.i./A/season) • Bulb vegetables: 6-15.5 fl oz/A (max 1.5 lb a.i./A/season) • Canola: 6-15.5 fl oz/A (max 0.45 lb a.i./A/season) • Carrots: 9-15.5 fl oz/A (max 2 lb a.i./A/season) • Celery: 9-15.5 fl oz/A (max 1.5 lb a.i./A/season) • Christmas trees: 6-15.5 fl oz/A (max 2 lb a.i./A/season) • Clover: 6-15.5 fl oz/A (max 0.75 lb a.i./A/season) • Corn: 6-15.5 fl oz/A (max 2 lb a.i./A/season) • Cotton: 6-9 fl oz/A (max 27 oz/season) • Cucurbits: 11-15.5 fl oz/A (max 1.5 lb a.i./A/season) • Herbs & spices: 6-15.5 fl oz/A (max 1.5 lb a.i./A/season) • Leafy vegetables except brassica: 6-15.5 fl oz/A (max 1.5 lb a.i./A/season) • Legume vegetables, dry and succulent: 6-15.5 fl oz/A (max 1.5 lb a.i./A/season) • Mint: 6-15.5 fl oz/A (max 0.75 lb a.i./A/season) • Non-grass animal feeds, forage, fodder, straw and hay: 6-15.5 fl oz/A (max 0.75 lb a.i./A/season) • Oilseed crops: 6-15.5 fl oz/A (max 0.45 lb a.i./A/season) • Peppers and other fruiting vegetables, except cucurbits: 6-15.5 fl oz/A (max 1 lb a.i./A/season) • Potatoes: 6-15.5 fl oz/A (max 2 lb a.i./A/season) • Rice: 9-15.5 fl oz/A (max 0.7 lb a.i./A/season) • Sorghum: 6-15.5 fl oz/A (max 0.75 lb a.i./A/season) • Soybeans: 6-15.5 fl oz/A (max 1.5 lb a.i./A/season) • Tomatoes: 5-6 fl oz/A (max 0.6 lb a.i./A/season) • Vegetables, leaves of root and tuber: 6-15.5 fl oz/A (max 2 lb a.i./A/season) • Vegetables, root: 6-15.5 fl oz/A (max 2 lb a.i./A/season) • Vegetables, tuberous and corm: 6-15.5 fl oz/A (max 2 lb a.i./A/season) • Watercress: 6-15.5 fl oz/A (max 1.5 lb a.i./A/season) • Wheat, triticale: 4-12 fl oz/A (max 0.4 lb a.i./A/season) • Wild rice: 12.5-15.5 fl oz/A (max 0.7 lb a.i./A/season)
Ridomil Gold SL	Mefenoxam 4 lb/gal - SL	100-1202	Soil- injected or incorporated: 0.5-3 pt/A (max 1.5 lb a.i./A/crop) Soil directed and other foliar	Soil-injected or –incorporated: <ul style="list-style-type: none"> • Alfalfa: 0.25-0.5 pt/A • Artichoke: 1-2 pt/A • Avocados: 2-4 pt/A (max 6 lb a.i./A/crop) • Carrots : 0.5-2 pt/A (max 1 lb a.i./A/crop soil applied and 0.4 lb a.i./A/crop foliar) • Clover 0.25-0.5 pt/A • Cole crops: 0.25-2 pt/A (max 1 lb a.i./A/crop soil-applied and 0.5 a.i./A/crop foliar) • Cotton: 0.075-0.15 fl oz/1,000 row ft • Cucurbits: 1-2 pt/A (max 1 lb a.i./A/crop soil-applied)

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
			applications: 0.5-2 pt/A (max 1.5 lb a.i./A/crop)	and 0.5 lb a.i./A/crop foliar) <ul style="list-style-type: none"> • Fruiting vegetables except cucurbits: 1 pt/A (max 1.5 lb a.i./A/crop soil-applied and 0.5 lb a.i./A/crop foliar) • Ginseng: 0.75 pt/A • Grass, forage, fodder and hay: 0.25-1 pt/A • Herbs: 1-2 pt/A (max 2 lb a.i./A/crop) • Leafy vegetables except Brassica: 1-2 pt/A (max 1 lb a.i./A/crop) Spinach: 0.25 pt/A (max 0.25 lb a.i./A/crop) • Legume vegetables: 0.5-1 pt/A (max 0.5 lb a.i./A/crop soil-applied and 0.4 lb a.i./A/crop foliar) • Onions: 0.5-1 pt/A (max 1 lb a.i./A/crop) • Peanuts: 0.25 pt/A • Pineapple: 0.5-1 pt/100 gal water • Potatoes: 0.42 fl oz/1,000 row ft (max 0.188 lb a.i./A/crop) • Root and tuber vegetables: 1-2 pt/A • Soybeans: 0.37-1.25 pt/A • Strawberries: 1 pt/A (max 1.5 lb/A/crop) Sugar beets: 1-2 pt/A • Tomato: 1-2 pt/A (max 1.5 lb a.i./A/crop soil-applied and 0.5 lb a.i./A/crop foliar) Soil directed and other foliar applications: <ul style="list-style-type: none"> • Alfalfa: 0.25 pt/A • Apple: 2qt/A • Asparagus: 1 pt/A • Avocados: 1-4 pt/A (max 6 lb a.i./A/crop) • Blueberries: 3.6 pt/A (max 3.6 lb a.i./A/crop) • Carrots: 0.2 pt/A (max 1 lb a.i./A/crop soil applied and 0.4 lb a.i./A/crop foliar) • Citrus: 1-3 qt/A (max 6 lb a.i./A/crop) • Cole crops: 0.125-0.25 pt/A (max 1 lb a.i./A/crop soil-applied and 0.5 a.i./A/crop foliar) • Cranberries: 1-1.75 pt/A (max 2.65 lb a.i./A/crop) • Cucurbits: 0.25-0.4 pt/A (max 1 lb a.i./A/crop soil-applied and 0.5 lb a.i./A/crop foliar) • Fruiting vegetables except cucurbits: 1 pt/A (max 1.5 lb a.i./A/crop soil-applied and 0.5 lb a.i./A/crop foliar) • Herbs: 1-2 pt/A (max 2 lb a.i./A/crop soil applied) • Hops: 0.5 pt/A (max 0.25 lb a.i./A/crop soil applied and 0.5 lb a.i./A/crop foliar applied) • Legume vegetables: 0.125-0.2 pt/A (max 0.5 lb a.i./A/crop soil-applied and 0.4 lb a.i./A/crop foliar) • Lettuce: 0.125-0.25 pt/A (max 1 lb a.i./A/crop soil-applied and 0.4 lb a.i./A/crop foliar) • Lingonberry: 3.6 pt/A (max 3.6 lb a.i./A/crop) • Peanuts: 0.5-1 pt/A • Raspberries: 0.25 pt/1,000 row ft • Stone fruit: 2 qt/A (max 6 lb a.i./A/crop) • Strawberries: 1 pt/A (max 1.5 lb a.i./A/crop) • Tomato: 1 pt/A (max 1.5 lb a.i./A/crop soil-applied and 0.5 lb a.i./A/crop foliar) • Tree nuts: 2 qt/A (max 6 lb a.i./A/crop) Tropical fruit (papaya, black sapote, star apple, canistel, mamey sapote, mango, sapodilla): 1.5-3 pt/A (max 3 lb a.i./A/season) • Tropical fruit (sugar apple, atemoya, custard apple, cherimoya, ilama, sursop birida, starfruit): 1.5-3 pt/A

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				(max 1.75 lb a.i./A/season) <ul style="list-style-type: none"> Tropical fruit (kiwi): 5.6-11.2 oz/40 gals water (max 1.75 lb a.i./A/season)
Royal MH-30	Maleic hydrazide potassium salt 180 g/L - SC	400-84	1.5-2 gal/40-50 gal water/A (max 1 appl./season. Repeat only if rain occur within 6 hours from 1 st treatment)	<ul style="list-style-type: none"> Potatoes: 2 gal/30 gal water/A (max 1 appl./season) Onions: 1.33 gal/30 gal water/A (max 1 appl./season)
Royaltac	n-decanol 684 g/L	400-135	1.5-2.75 in 50 gal water (40-60 gal diluted mixture/A)	
Sevin 80 Solupak	Carbaryl 80% SP	264-316	1.25-2.5 lb/A (max 4 appl./crop, 10 lb/A/crop)	<ul style="list-style-type: none"> Asparagus: 1.25-5 lb/A (max 5 appl./crop, 12.5 lb/A/year) Brassica leafy crops: 0.62-2.5 lb/A (max 4 appl./crop, 7.5 lb/A/crop) Field corn and popcorn: 1.25-2.5 pt/A (max 4 appl./crop, 10 lb/A/crop) Sorghum: 1.25-2.5 lb/A (max 4 appl./crop, 7.5 lb/A/crop) Rice: 1.25-1.87 lb/A (max 2 appl./crop, 5 lb/A/crop) Sweet corn: 1.25-2.5 lb/A (max 8 appl./crop, 20 lb/A/crop) Cucurbit vegetables: 0.62-1.25 lb/A (max 6 appl./crop, 7.5 lb/A/crop) Flax : 1.25-1.87 lb/A (max 2 appl./crop, 3.75 lb/A/crop) Alfalfa : 0.62-1.87 lb/A (max 1 appl./cutting, 1.87 lb/A/cutting) Pasture and grasses grown for seed: 1.25-1.87 lb/A (max 2 appl./year, 3.75 lb/A/year) Rangeland: 0.62-1.25 lb//A (max 1 appl./year, 1.25 lb/A/year) Fruiting vegetables: 1.25-2.5 lb/A (max 7 appl./crop, 10 lb/A/crop) Leafy vegetable: 0.62-2.5 lb/A (max 5 appl./crop, 7.5 lb/A/crop) Legume vegetables: 0-62-1.87 lb/A (max 4 appl./crop, 7.5 lb/A/crop) Non cropland: 0.33-1.87 lb/A (max apple./year, 3.75 lb/A/year) Okra: 1.25-1.87 lb/A (max 7.5 lb/A/season) Peanuts: 0.62-2.5 lb/A (max 5 appl./crop, 10 lb/A/crop) Prickly pear cactus: 2.5 lb/A (max 7.5 lb/A/crop) Root and tuber crops: 0.62-2.5 lb/A (max 6 appl./crop, 7.5 lb/A/crop) Sugar beets: 1.25-1.87 lb/A (Max 2 appl./crop, 5 lb/A/crop) Sweet potatoes: 1.25-2.5 lb/A (max 8 appl./crop, 10 lb/A/crop) Small fruits and berries: 1.25-2.5 lb/A (max 5 appl./crop, 12.5 lb/A/crop) Sunflowers: 1.25-1.87 lb/A (max app./crop, 3.75 lb/A/crop) Citrus fruit: 2.5-20 lb/A (max 8 appl./A/crop, 25 lb/A/crop) Olives: 6.25-9.37 lb/A (max 2 appl./crop, 18.75-lb/A/crop)

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
				Pome fruit: 0.62-3.75 lb/A (max 8 appl./crop, 18.75 lb/A/crop) • Stone fruit: 2.5-6.25 lb/A (max 3 appl./crop, 17.5 lb/A/crop) Pistachios: 3.34-6.25 lb/A (max 4 appl./crop, 18.75 lb/A/crop) Tree nuts: 2.5-6,25 lb/A (max 4 appl./crop, 18.75 lb/A/crop) • Forested areas and rangeland trees: 0.9-1.25 lb/A (max 2 appl./year)
Spartan 4F Herbicide	Sulfentrazone 4 lb/gal - FL	279-3220	4.5-12 fl oz/A (max 0.375 lb a.i./A/12 months)	• Soybeans: 4.5-12 fl oz/A (max 0.375 lb a.i./A/12 months) • Sugarcane: 4.5-12 fl oz/A (max 0.375 lb a.i./A/12 months) • Sunflowers: 3-8 fl oz/A (max 0.25 lb a.i./A/12 months) • Cabbage: 2.25-12 fl z/A (max 0.375 lb a.i./A/12 months) • Dry peas: 2.25 – 8 fl oz/A (max 0.25 lb a.i./A/12 months) Horseradish: 2.25 – 8 fl oz/A (max 0.25 lb a.i./A/12 months) Lima beans: 2.25 – 6 fl oz/A (max 0.187 lb a.i./A/12 months) Mint: 4.5-12 fl oz/A (max 0.375 lb a.i./A/12 months) • Sod production: 4-12 fl oz/A (max 0.375 lb a.i./A/12 months)
Super Boll	Ethephon 6 lb/gal	352-691-1812	1.33-2.66 pt/A	• Cotton: 1.33-2.66 pt/A
Telone C-35	1,3-dichloropropene 7.1 lb/gal + chloropicrin 3.89 lb/gal	62719-302	Seedbed: 60.5-79 gal/A (CORRECT?) Field: 13-26 gal/A	• Vegetable crops: 13-36 gal/A Field crops: 13-26 gal/A • Fruit and nut crops: 39-50 gal/A • Strawberries: 39-50 gal/A • Nursery crops: 60.5-79 gal/A • Mint: 33 gal/A
Terramaster 4EC	Etridiazole 4 lb/gal - EC	400-422	Float-bed: 1-1.4 fl oz/100 gal water (max 2.8 fl oz/100 gal/crop)	• Cotton: 4-8 fl 05/A
Tracer	Spinosad 4 lb/gal	62719-267	1.4-2.9 fl oz/A (max 14.4 fl oz/A/year)	• Corn: 1-3 fl oz/A (max 6 fl oz/A/year) • Cotton: 1.4-2.9 fl oz/A (max 14.4 fl oz/A/growing season) • Grass forages, grass grown for seed, pastures, rangeland and sod farms: 1-2 fl oz/A (max 6 fl oz/A/season) • Peanut: 1.5-3 fl oz/A (max 9 fl oz/A/crop) • Small cereal grains: 1.5-3 fl oz/A (max 9 fl oz/A/crop) • Sorghum, grain amaranth, milo, pearl millet and proso millet: 1.5-3 fl oz/A (max 14.4 fl oz/A/crop) • Soybean: 1-2 fl oz/A (max 6 fl oz/A/year)
Vapam HL	Metam sodium 4.26 lb/gal	5481-468	Plant beds: 0.75-1.125 gal/30 gal water/100 sq yards (tarp method) 1.875 gal/150-200 gal water/100 sq	• Peanuts: 7.5 gal/A • Mint: 37.5- 75 gal/A • Potatoes: 37.5-75 gal/A • Tree replant sites in commercial orchards: 0.75-1.5 qt/100 sq ft • Establishment of transplant orchards and vineyards: 50-75 gal/A • Carrots: 30-75 gal/A

Product name	Content	Registration N.	Rate of use on tobacco	Rate of use on other crops
			yards	<ul style="list-style-type: none"> Onions: 30-75 gal/A Sugar beets: 37.5-75 gal/A Orchard re-plant: 56-75 gal/A Wheat and barley: 1.88-7.5 gal/A
Dupont Vydate C-LV	Oxamyl 3.77 lb/gal - SL	352-532	68 fl oz/A (max 68 fl oz/A/season)	<ul style="list-style-type: none"> Cotton: 4.25-34 fl Oz/A (max 102 fl oz/A/growing season, max 8 appl./season) Peanuts: 17 fl oz/A (max 170 fl oz/A/season, max 8 appl./season) Potatoes: 17-136 fl oz/A (max 306 fl oz/A/season, max 8 appl./season)
Warrior II with Zeon Technology	Lambda-cyhalothrin 2.08/gal CS	100-1295	0.96-1.92 fl oz/A (max 0.09 lb a.i./A/year)	<ul style="list-style-type: none"> Alfalfa: 0.96-1.92 fl oz/A (max 0.12 lb a.i./A/season) Canola: 0.96-1.92 fl oz/A (max 0.09 lb a.i./A/season) Corn: 0.96-1.92 fl oz/A (max 0.12 lb a.i./A/crop) Rice: 1.6-2.56 fl oz/A (max 0.12 lb a.i./A/season) Sorghum (0.96-1.92 fl oz/A (max 0.08 lb a.i./A/season) Barley, buckwheat, oats, rye, triticale, wheat: 0.96-1.92 fl oz/A (max 0.06 lb a.i./A/season) Cole crops: 0.96-1.92 fl oz/A (max 0.24 lb a.i./A/season) Cotton: 0.96-2.56 fl oz/A (max 0.2 lb a.i./A/season) Cucurbit vegetables: 1.28-1.92 fl oz/A (max 0.18 lb a.i./A/season) Fruiting vegetables : 0.96-1.92 fl oz/A (max 0.36 lb a.i./A/season) Grass forage, fodder and hay: 0.96-1.92 fl oz/A (max 0.09 lb a.i./A/season) Legume vegetables (beans and peas): 0.96-1.92 fl oz/A (max 0.12 lb a.i./A/season) Legume vegetables (soybeans): 0.96-1.92 fl oz/A (max 0.06 lb a.i./A/season) Lettuce: Legume vegetables (beans and peas): 0.96-1.92 fl oz/A (max 0.3 lb a.i./A/season) Onion and garlic:0.96-1.92 fl oz/A (max 0.24 lb a.i./A/season) Peanuts: 0.96-1.92 fl oz/A (max 0.12 lb a.i./A/season) Pome fruit: 1.28-2.56 fl oz/A (max 0.2 lb a.i./A/year) Stone fruit: 1.28-2.56 fl oz/A (max 0.2 lb a.i./A/year) Sugarcane: 1.60-2.56 fl oz/A (max 0.16 lb a.i./A/year) Sunflower: 0.96-1.92 fl oz/A (max 0.12 lb a.i./A/season) Tree nuts:1.28-2.56 fl oz/A (max 0.16 lb a.i./A/year) Tuberous and corm vegetables: 0.96-1.92 fl oz/A (max 0.12 lb a.i./A/season) Conifer and deciduous trees: 1.28-2.56 fl oz/A (max 0.5 lb a.i./A/year) Non cropland: Max 0.2 lb a.i./A/year