

ANNEX 1: UK Approvals for pesticides on outdoor hops

| Active | Product Name (not exhaustive) | Acceptability for brewing | Latest UK expiry date | Comments | EU/UK MRL as of May 2013 |
|--------|-------------------------------|---------------------------|-----------------------|----------|--------------------------|
|--------|-------------------------------|---------------------------|-----------------------|----------|--------------------------|

****Extension of Authorisation for Minor Uses ("Off-label") allows a product which is authorised for use on a major crop to be used on a minor crop such as hops for as long as the product retains its main authorisation. Efficacy and phytotoxicity on the minor crop has not been tested: this is the user's responsibility.**

Key: * value at limit of detection

| Fungicides | | | | | |
|-----------------------|---------------------------------------|--|------------|---|--------------|
| Boscalid | Bellis (also contains pyraclostrobin) | Limited small scale trials with treated barleys at IFBM showed no effect on beer quality. Accepted for barley, but prior to ear emergence only. Hops not tested . | 31/07/2019 | UK authorisation under Minor Uses Authorisation** | 60 |
| Bupirimate | Nimrod | Accepted on the basis of brewing trials at Campden BRI | 31/12/2021 | | 10 |
| Copper oxychloride | Cuprokylt | Accepted on the basis of brewing trials at Campden BRI using metalaxyl-copper mixture | 31/12/2021 | | 1000 (Cu) |
| Cymoxanil | Option | Accepted on the basis of brewing trials at Campden BRI | 31/12/2021 | UK authorisation under Minor Uses | 2 |
| Fenpropimorph | Corbel | Accepted on the basis of brewing trials at Campden BRI | 31/12/2021 | UK authorisation under Minor Uses | 10 |
| Metalaxyl -M | SL 567A | Accepted on the basis of brewing trials at Campden BRI | 30/06/2018 | UK authorisation under Minor Uses | 10 |
| Myclobutanil | Systhane 20EW | Accepted on the basis of brewing trials at Campden BRI | 31/12/2021 | UK authorisation under Minor Uses | 2 |
| Penconazole | Topas | Accepted on the basis of brewing trials at Campden BRI | 31/12/2021 | | 0.5 |
| Potassium bicarbonate | Potassium bicarbonate | Accepted on the basis of evaluation at CampdenBRI | 31/08/2019 | Authorised as a commodity substance | No limit set |

| | | | | | |
|----------------|---------------------------------|--|------------|---|-----|
| Pyraclostrobin | Bellis (also contains boscalid) | Limited small scale trials with treated barleys at IFBM showed some small effect on alcohol production. Accepted for barley, but prior to ear emergence only | 31/07/2019 | UK authorisation under Minor Uses Authorisation** | 10 |
| Quinoxifen | Fortress | Accepted for barley on the basis of trials at TNO. Not tested with hops. | 01/09/2014 | UK authorisation under Minor Uses Authorisation** | 0.5 |
| Sulphur | Thiovit Jet | Accepted for use before burr stage only on the basis of brewing trials at CampdenBRI | 31/12/2021 | | 100 |

Insecticides and Acaricides

| | | | | | |
|---------------|----------------------|--|------------|--|------|
| Abamectin | Agrimec | Not tested | 31/12/2021 | UK authorisation under Minor Uses | 0.05 |
| Cypermethrin | Toppel 100EC | Accepted on the basis of brewing trials at Campden BRI | 31/08/2013 | | 30 |
| Deltamethrin | Agrotec Deltamethrin | Accepted on the basis of brewing trials at Campden BRI | 31/12/2021 | | 5 |
| Fonicamid | Mainman | Not tested | 31/08/2013 | UK authorisation under Minor Uses | 2 |
| Imidacloprid | Imidamex 700WG | Accepted on the basis of brewing trials at Campden BRI | 31/12/2021 | Imidacloprid is a neonicotinoid: use on many crops to be temporarily withdrawn from Dec 2013 but this does not appear to apply | 10 |
| Pymetrozine | Plenum WG | Accepted on the basis of brewing trials at Campden BRI | 30/06/2018 | | 15 |
| Pyrethrins | various | Accepted on the basis of brewing trials at Campden BRI with several synthetic pyrethroids for both barley and hops. | 31/12/2021 | General acceptance for all edible crops. Pyrethrins are natural products and allowed for organic crops. | 0.5 |
| Spirotetramat | Movento | Not tested | 31/07/2015 | UK authorisation under Minor Uses | 15 |
| Tebufenpyrad | Masai | Accepted on the basis of brewing trials at Campden BRI | 31/12/2021 | | 0.5 |
| | | | | | |

Herbicides

| | | | | | |
|---------------------------------------|------------------|---|------------|---|-----------------------------------|
| Carfentrazone-ethyl | Shark, Spotlight | Accepted on the basis of evaluation at Campden BRI | 31/01/2019 | General acceptance for all edible crops | 0.02* |
| Diquat | Dragoon | Accepted on the basis of established use prior to 1980 with no problems. | 30/07/2018 | | 0.1* |
| Fluazifop-P | Fusilade Max | Accepted on the basis of evaluation at CampdenBRI | 31/12/2021 | | 0.1 |
| Glufosinate-ammonium | Challenge | Accepted on the basis of brewing trials at Campden BRI using treated barley | 31/12/2021 | General acceptance for all edible crops | 0.1* |
| Glyphosate (including trimesium salt) | various | Accepted on the basis of brewing trials at Campden BRI using treated barley | 30/06/2018 | General acceptance for all edible crops | 0.1* (0.05* for trimesium ion) |
| Isoxaben | Flexidor | Accepted on the basis of established use prior to 1980 with no problems. | 31/12/2021 | | 0.05* |
| Oxadiazon | Ronstar Liquid | Accepted on the basis of established use prior to 1980 with no problems. | 31/12/2021 | | 0.05* |
| Propyzamide | Kerb Flo | Accepted on the basis of early application and established use prior to 1980 with no problems. | 21/07/2019 | | 0.05* |
| | | | | | |

Defoliant

| | | | | | |
|--------|---------|---|------------|-----------------------------------|-------|
| Diquat | Reglone | Accepted on the basis of brewing trials at Campden BRI | 31/12/2015 | UK authorisation under Minor Uses | 0.1 * |
| | | | | | |

Miscellaneous

| | | | | | |
|-----------------------------|---------|--|--|--|-----------------|
| Aluminium ammonium sulphate | various | Not tested | | Animal repellent, approved for all edible crops | default (0.01*) |
| Metaldehyde | various | Accepted on the basis of application type and established use prior to 1980 with no problems. | | Slug bait, approved for all edible crops. Applied to soil. | 0.05* |

ANNEX 2. Pesticides approved for use on hops in EU countries, as of May 2013 (reproduced courtesy of Peter Glendinning, British Hops)

| Chemical Active Ingredient | Activity | Germany | Czech Rep. | Slovenia | Poland | France | Spain | Belgium | UK | EU MRL (ppm) | BBPA: Acceptability for Brewing. |
|----------------------------|-------------|-------------------|------------|-----------------|------------|----------------|------------------------|---------|-------------|--------------|--|
| Abamectin | Acaricide | Agrimek, Vertimec | Vertimec | Vertimec 1.8%EC | na | na | na | na | Agrimec | 0.05 | Not tested |
| Acetamiprid | Insecticide | na | Mospilan | na | na | na | na | na | na | 0.1* | Not tested |
| Azoxystrobin | Fungicide | Ortiva | Ortiva | Quadris | na | na | na | na | na | 30 | Acceptable on the basis of brewing trials on barley, 1997 |
| Boscalid | Fungicide | Bellis | Bellis | na | na | na | na | Bellis | Bellis | 60 | Acceptable on the basis of brewing trials on barley, 2004 |
| Bromoxynil | Herbicide | Buctril | na | na | na | na | na | na | na | 0.1* | Accepted on barley |
| Bupirimate | Fungicide | na | na | na | na | na | Nimrod, Quatro | na | Nimrod | 10 | Accepted on the basis of brewing trials at Campden BRI |
| Carfentrazone-ethyl | Herbicide | na | na | na | na | Spotlight Plus | na | na | Spotlight # | 0.02* | Accepted on the basis of evaluation at Campden BRI |
| Copper | Fungicide | Funguran | various | various | various | various | various | various | Cuprokylt | 1000 | Accepted on the basis of brewing trials at Campden BRI using metalaxyl-copper mixture |
| Cymoxanil | Fungicide | Aktuan | Curzate K | Curzate R | Curzate Cu | Cpral NC | na | na | Option | 2 | Accepted on the basis of brewing trials at Campden BRI |
| Cypermethrin | Insecticide | na | Vaztak | na | various | na | various | na | Toppel | 30 | Accepted on the basis of brewing trials at Campden BRI |
| Deltamethrin | Insecticide | na | na | na | na | na | Decis Expert, Delaplan | na | Decis | 5 | Accepted on the basis of brewing trials at Campden BRI |
| Diquat | Herbicide | Reglone | na | Reglone 200SL | na | various | na | Reglone | Reglone | 0.1* | Accepted on the basis of established use prior to 1980 with no problems. |
| Dithianon | Fungicide | Delan 700WG | na | Delan 700WG | na | na | na | various | na | 100 | Not tested |

ANNEX 2. Pesticides approved for use on hops in EU countries, as of May 2013 (reproduced courtesy of Peter Glendinning, British Hops)

| Chemical Active Ingredient | Activity | Germany | Czech Rep. | Slovenia | Poland | France | Spain | Belgium | UK | EU MRL (ppm) | BBPA: Acceptability for Brewing. |
|-----------------------------|-------------|---------------|-------------|--------------------------|----------------|---------------|-------------------------|----------------|-------------|--------------|---|
| Fenpropimorph | Fungicide | na | na | na | na | na | na | na | Corbel | 10 | Accepted on the basis of brewing trials at Campden BRI |
| Fenpyroximate | Acaricide | na | Ortus | na | na | na | na | na | na | 10 | Not tested |
| Flonicamid | Insecticide | Teppeki | Teppeki | Teppeki | na | Teppeki | na | Teppeki | Mainman | 2 | Not tested |
| Fluazifop-p-butyl | Herbicide | Fusilade Max | Fusilade | na | na | na | na | na | Fusilade | 0.1 | Accepted on the basis of evaluation at CampdenBRI |
| Folpet | Fungicide | | Folpan | Folpan 80WDG | na | na | na | na | na | 150 | Under test for barley |
| Fosetyl-AI | Fungicide | Aliette | Aliette | Aliette flash | Aliette | Aliette flash | various | na | na | 1500 | Accepted on the basis of brewing trials at Campden BRI |
| Glufosinate-Ammonium | Herbicide | na | na | na | na | na | na | na | Challenge # | 0.1* | Accepted on the basis of brewing trials at Campden BRI using treated barley |
| Glyphosate | Herbicide | na | na | na | na | na | na | na | various # | 0.1* | Accepted on the basis of brewing trials at Campden BRI using treated barley |
| Hexythiazox | Acaricide | Ordoval | Nissorun | Nissorun 10WP | na | na | na | na | na | 20 | Not tested |
| Imidacloprid | Insecticide | Confidor 70WG | Confidor | Confidor, Kohinor SL 200 | Confidor 200SL | na | Confidor 20 LS, Kohinor | Confidor 200SL | Admire | 10 | Accepted on the basis of brewing trials at Campden BRI |
| Isoxaben | Herbicide | na | na | na | na | na | na | na | Flexidor | 0.05 | Accepted on the basis of established use prior to 1980 with no problems. |
| Lambda Cyhalothrin | Insecticide | Karate Zeon | Karate Zeon | Karate Zeon 5 | various | Karate Xpress | Karate King-Zeon | na | na | 10 | Accepted on the basis of brewing trials at Campden BRI |
| Mandipropamid | Fungicide | Revus | Pergado | na | na | na | na | Revus | na | 50 | Not tested |

ANNEX 2. Pesticides approved for use on hops in EU countries, as of May 2013 (reproduced courtesy of Peter Glendinning, British Hops)

| Chemical Active Ingredient | Activity | Germany | Czech Rep. | Slovenia | Poland | France | Spain | Belgium | UK | EU MRL (ppm) | BBPA: Acceptability for Brewing. |
|--------------------------------|--------------|------------------------|--------------|------------------------|------------|--------------|----------------|---------------|-----------------------|----------------------------------|---|
| MCPA | Herbicide | U 46 M fluid | Dicopur | na | na | na | na | na | na | 0.1* | Accepted for barley. Not tested for hops. |
| Metalaxyl-m / Mefenoxam | Fungicide | Fonganil Gold, Ridomil | Ridomil Gold | Fonganil Gold, Ridomil | na | na | na | na | SL567A | 10 | Accepted on the basis of brewing trials at Campden BRI |
| Metaldehyde | Molluscicide | na | na | na | na | na | na | various | Metarex # | 0.05* | Accepted on the basis of application type and established use prior to 1980 with no problems. |
| Metiram | Fungicide | na | na | na | na | na | na | Polyram WG | na | 25 total dithiocarbamates | Accepted prior to burr stage only on the basis of brewing trials at Campden BRI |
| Milbemectin | Acaricide | Milbeknock | na | Milbeknock | na | na | na | na | na | 0.1 | Not tested |
| Myclobutanil | Fungicide | Systhane 20EW | na | na | na | Systhane New | Systhane Forte | Systhane 20EW | Systhane | 2 | Accepted on the basis of brewing trials at Campden BRI |
| Oxadiazon | Herbicide | na | na | na | na | na | na | na | Ronstar | 0.05* | Accepted on the basis of established use prior to 1980 with no problems. |
| Penconazole | Fungicide | na | na | na | na | na | na | na | ? | 0.5 | Accepted on the basis of brewing trials at Campden BRI |
| Potassium bicarbonate | Fungicide | na | na | na | na | na | na | na | Potassium Bicarbonate | exempt | Accepted on the basis of evaluation at CampdenBRI |
| Propargite | Insecticide | na | Omite | na | Omite 30WP | na | na | na | na | 100 | Not tested |
| Propyzamide | Herbicide | na | na | na | na | na | na | na | Kerb Flo | 0.05* | Accepted on the basis of early application and established use prior to 1980 with no problems. |
| Pymetrozine | Insecticide | Plenum 50WG | Chess | Chess 50WG | na | Plenum 50WG | na | Plenum | Plenum 50WG | 15 | Accepted on the basis of brewing trials at Campden BRI |

ANNEX 2. Pesticides approved for use on hops in EU countries, as of May 2013 (reproduced courtesy of Peter Glendinning, British Hops)

| Chemical Active Ingredient | Activity | Germany | Czech Rep. | Slovenia | Poland | France | Spain | Belgium | UK | EU MRL (ppm) | BBPA: Acceptability for Brewing. |
|----------------------------|-------------|-------------------|------------|-----------|---------|---------|-----------------|---------------|--|-----------------------------------|---|
| Pyraclostrobin | Fungicide | Bellis | na | na | na | na | na | na | Bellis (+boscalid) | 10 | Accepted for barley. Not tested for hops. |
| Pyraflufen-ethyl | Herbicide | Quickdown | na | na | na | na | na | na | na | 0.05 | Not tested |
| Quinoxifen | Fungicide | Fortress 250 | IQ Crystal | na | na | na | na | Fortress | Fortress | 0.5 | Accepted for barley on the basis of trials at TNO. Not tested with hops. |
| Spirotetramat | Insecticide | na | Movento | na | Movento | na | na | Movento 100SC | Movento | 15 | Not tested |
| Sulphur | Fungicide | Sulfur | Kumulus | various | various | various | Sulfur | various | various | 100 | Accepted for use before burr stage only on the basis of brewing trials at Campden BRI |
| Tebuconazole | Fungicide | na | Horizon | na | na | na | na | na | na | 30 | Accepted on the basis of established use prior to 1980 with no problems. |
| Tebufenpyrad | Acaricide | na | na | na | na | na | na | Masai 20 WP | Masai | 0.5 | Accepted on the basis of brewing trials at Campden BRI |
| Tepraloxydim | Herbicide | Aramo | na | na | na | na | na | na | na | 0.1* | Not tested |
| Thiamethoxam | Insecticide | Actara | Actara | na | na | na | na | na | na | 0.1 | Not tested |
| Tolyfluanid | Fungicide | na | na | na | Zato | na | na | na | na | 50 | Not tested |
| Triadimenol | Fungicide | Bayfidan | Bayfidan | na | na | na | Bayfidan 312 SC | na | na | 10 | Accepted on the basis of established use prior to 1980 with no problems. |
| Trifloxystrobin | Fungicide | D- Flint | na | Zato 50WG | na | Flint | na | na | na | 30 | Accepted for barley. Not tested for hops. |
| | | na = not approved | | | | | | | # = approval for use on all edible crops | * = Limit of Determination | |

Annex 3: Non-EU Registration and MRLs for pesticides used on HOPS

chemicals known to have MRLs for hops in at least 1 other country. (Except for ubiquitous environmental contaminants such as DDT). NL = no limit needed. Default =0.01mg/kg

T = temporary, E = extraneous (ie no current registration) Default value is residue allowed if no MRL is set Values in BOLD are higher than the detection limit
* = value set at the limit of determination

Notes: * = limit of detection: MRLs above the limit of detection are in bold

| COLOUR CODE | MRL LOWER than EU | | | MRL same as or close to EU | | | MRL HIGHER than EU | | |
|-----------------------------|-------------------|-------------------------------------|-------------------------------------|----------------------------|---|--|---------------------------------------|------------------|------------------|
| Chemical | Australia | Canada | China | Hong Kong | Japan | South Africa | US | WHO | EU |
| Data Source | FSANZ | Health Canada | US FAS Online database | LN 73 of 2012 | Japan Food Chemical Research Foundation | US FAS Online database | US FAS Online database | Codex database | EU MRL Database |
| Issue or date accessed | As of March 2013 | As of March 2013 default = 0.1mg/kg | NO MRLS for hops in China, although | As of March 2013 | As of March 2013 default = 0.01 | As of March 2013, source, US FAS Online database. RSA follows either EU or Codex | FAS Online database, as of March 2013 | As of March 2013 | As of March 2013 |
| Abamectin | 0.1 | | | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.05 |
| acequinocyl | | | | 4 | 15 | 15 | 4 | | 15 |
| acephate | | | | | | 0.05 | | | 0.05 |
| acetamiprid | | | | | | 0.1 | | | 0.1 |
| aldicarb | | | | | 0.05 | | | | 0.05* |
| aldrin + dieldrin | | | | | 0.06 | | | | 0.02* |
| alpha-cypermethrin | | | | | 20 | | | | 30 |
| aluminium sulphate | | | | | | | | | default |
| aluminium ammonium sulphate | | | | | | | | | default |
| ametoctradin | | 10 | | | | 15 | 10 | | 15 |
| amitrole | 0.01* | | | | | | | | 0.02 |
| aramite | | | | | 0.1* | | | | 0.1* |
| asulam | 0.1* | | | | 0.1 | | | | 0.05* |
| atrazine | | | | | 0.1* | | | | 0.1* |

| Chemical | Australia | Canada | China | Hong Kong | Japan | South Africa | US | WHO | EU |
|---------------------|-----------|--------|-------|-----------|-----------------|--------------|-----|-----|---------|
| azoxystrobin | | 20 | | 30 | 30 | | 20 | 30 | 30 |
| Barban | | | | | 0.1 | | | | 0.1* |
| benalaxyl | | | | | 0.2 | | | | 0.1* |
| benfuracarb | | | | | 5 | | | | 5 |
| benomyl | | | | | see carbendazim | | | | |
| bensulfuron-methyl | | | | | | | | | default |
| bensulide | | | | | 0.03 | | | | default |
| bentazone | | | | | 0.02 | | | | 0.1* |
| benzyladenine | | | | | 0.02 | | | | default |
| bifenazate | | 15 | | | 15 | 20 | 15 | 20 | 0.02* |
| bifenthrin | | | | 20 | 10 | 20 | 10 | 20 | 10 |
| bilanafos | | | | | 0.008 | | | | default |
| bioresmethrin | | | | | 0.1 | | | | 0.2* |
| bitertanol | | | | | 0.1 | | | | 0.1* |
| boscalid | 0.5 | 35 | | 60 | 35 | 60 | 35 | 60 | 60 |
| brodifacoum | | | | | 0.001 | | | | default |
| bromide (inorganic) | | | | | 400 | | | | 20 |
| bromophos-ethyl | | | | | 0.1* | | | | 0.1* |
| bromopropylate | | | | | 1 | | | | 0.05* |
| bromoxynil | | | | | | | | | 0.1* |
| bupirimate | | | | | | | | | 10 |
| buprofezin | | | | | | | | | 5 |
| butylamine | | | | | 0.1 | | | | default |
| Carbendazim | | | | | 0.1 | | | | 0.1* |
| carbofuran | | | | | 10 | | | | 0.05* |
| carbosulfan | | | | | 1 | | | | 1 |
| carfentrazone ethyl | 0.05* | | | 0.1 | 0.3 | 0.02* | 0.1 | | 0.02* |
| cartap | | | | | 10 | | | | default |
| chlorantraniliprole | 0.01* | | | | 90 | 0.02* | 90 | | 0.02* |
| chlorbenside | | | | | 0.1* | | | | 0.1* |
| chlorbufam | | | | | 0.1* | | | | 0.1* |
| chlordane | | | | | 0.02 | | | | 0.02* |
| chlorfenapyr | | | | | | 0.1 | | | 0.1 |
| chlorfenson | | | | | 0.1 | | | | default |
| chlorfluazuron | | | | | 0.05 | | | | default |
| chlormequat | | | | | 0.1* | | | | 0.1* |
| chlorobenzilate | | | | | 0.1* | | | | 0.1* |
| chlorothalonil | | | | | 0.1 | | | | 50 |

| Chemical | Australia | Canada | China | Hong Kong | Japan | South Africa | US | WHO | EU |
|---|-----------|--------|-------|-----------|----------------------|--------------|-----|-----|---------|
| chloroxuron | | | | | 0.1* | | | | 0.1* |
| chlorpyrifos | | | | | 0.1* | 0.1* | | | 0.1* |
| chlorpyrifos-methyl | | | | | 0.1* | | | | 0.1* |
| chlozolate | | | | | 0.1* | | | | 0.1* |
| cinidon-ethyl | | | | | 0.1 | | | | 0.1* |
| clethodim | | | | | | 0.1 | 0.5 | | 0.1 |
| clodinafop-propargyl | | | | | 0.02 | | | | 0.05* |
| clofentezine | 0.2* | | | | 0.2 | | | | 0.05* |
| clomazone | | | | | 0.02* | | | | 0.02* |
| clopyralid | 2 | | | 5 | 5 | 5 | 5 | | 5 |
| clothianidin | | | | | 0.1 | | | | 0.05* |
| copper (from copper salts) | | | | | see individual salts | | | | 1000 |
| copper nonylphenolsulfonate | | | | | 0.04 | | | | default |
| copper tetraphthalate | | | | | 0.5 | | | | default |
| 4-CPA (chlorophenoxyacetic acid) | | | | | 0.02 | | | | default |
| cyanamide | | | | | | | | | 0.2 |
| cyazofamid | | | | | 0.02* | | 10 | | 0.02* |
| cycloprothrin | | | | | 0.02 | | | | default |
| cycloxydim | | | | | 0.05* | | | | 0.05* |
| cyfluthrin | | | | 20 | 20 | 20 | 20 | | 20 |
| cyhalothrin | | | | | 10 | | | | default |
| cymoxanil | | | | 7 | 2 | 2 | 7 | | 2 |
| cypermethrin | 0.01* | | | | 20 | | | | 30 |
| 2,4-D | | | | | 0.08 | 0.1* | 0.2 | | 0.1* |
| DBEDC | | | | | 0.5 | | | | default |
| DDT + DDE + TDE | | | | | 0.05 | | | | 0.05* |
| dalapon | | | | | | | | | 0.1 |
| daminozide | | 0.02* | | | | | | | 0.1* |
| deltamethrin | | | | | 5 | 5 | | | 5 |
| demeton-S-methyl | | | | | 0.05 | | | | default |
| diafenthiuron | | | | | 0.02 | | | | default |
| diallate | | | | | 0.1* | | | | 0.1* |
| diazinon | | 0.25 | | 0.5 | 0.5 | | | 0.5 | 0.5 |
| dichlofluanid | | | | | 5 | | | | default |
| 1,1-dichloro-2,2-bis(4-ethylphenyl)ethane | | | | | 0.1* | | | | 0.1* |

| Chemical | Australia | Canada | China | Hong Kong | Japan | South Africa | US | WHO | EU |
|--------------------------|----------------|--------|-------|-----------|--------|--------------|------|-----|---------|
| dichlorprop | | | | | 0.1 | | | | 0.1 |
| dichlorvos | | | | | 0.1 | | | | 0.02* |
| diclomezine | | | | | 0.02 | | | | default |
| dicofol | 5 | | | 50 | 50 | 50 | 65 | 50 | 50 |
| difenzoquat | | | | | 0.05 | | | | default |
| diflubenzuron | | | | | 0.05* | | | | 0.05* |
| diflufenican | | | | | 0.002* | | | | 0.05* |
| diflufenzopyr | | | | | 0.05 | | | | default |
| dimethenamid | | | | | 0.05 | 0.02* | 0.05 | | |
| dimethanamid-P | | | | 0.05 | | 0.02* | 0.05 | | 0.02* |
| dimethipin | | | | | 0.04* | | | | 0.1* |
| dimethoate | | | | | 0.05* | | | | 0.05* |
| dimethomorph | | 40 | | 80 | 80 | 80 | 60 | 80 | 50 |
| dinoseb | | | | | 0.1* | | | | 0.1* |
| dinoterb | | | | | 0.1* | | | | 0.1* |
| dioxathion | | | | | 0.1* | | | | 0.1* |
| diphenylamine | | | | | 0.05* | | | | 0.05* |
| diquat | 0.2 (T) | | | | 0.04* | 0.1* | 0.2 | | 0.1* |
| disulfoton | 0.5 | | | | 0.3 | | | | 0.05* |
| dithianon | | | | 100 | 100 | | | 100 | 100 |
| dithiocarbamates | 10 (T) | | | 30 | 30 | | | 30 | 25 |
| diuron | | | | | 0.02 | | | | 0.5 |
| 2,2-DPA | | | | | 0.05 | | | | default |
| Endosulfan | | | | | 0.1* | | | | 0.1* |
| endothall | | | | | 0.1 | | 0.1 | | default |
| endrin | | | | | 0.1* | | | | 0.1* |
| epoxiconazole | | | | | | | | | 0.1 |
| esfenvalerate | ee fenvalerate | | | | 5 | 0.05* | | | 0.05* |
| ethephon | | | | | 0.1* | | | | 0.1* |
| ethiofencarb | | | | | 0.5 | | | | default |
| ethirimol | | | | | | | | | 10 |
| ethoprop (ethoprophos) | | | | 0.02 | | 0.02* | 0.02 | | 0.02* |
| ethoxyquin | | | | | 0.05* | | | | 0.05* |
| ethyclozate | | | | | | | | | default |
| ethylene dibromide (EDB) | | | | | 0.01* | | | | 0.02* |
| ethylene dichloride | | | | | 0.02* | | | | 0.02* |
| etoxazole | | | | | 15 | 15 | 7 | 15 | 15 |
| Famoxadone | | | | 80 | | 0.05* | 80 | | 0.05* |

| Chemical | Australia | Canada | China | Hong Kong | Japan | South Africa | US | WHO | EU |
|----------------------|-----------|--------|-------|-----------|--------|--------------|------|-----|--------------------------|
| fenamiphos | | | | | 0.05* | | | | 0.05* |
| fenarimol | | | | | 5 | 5 | 5 | 5 | 5 |
| fenbutatin oxide | 20 | | | | 25 | | | | 0.1* |
| fenchlorphos | | | | | 0.1* | | | | 0.1* |
| fenhexamid | | | | | 100 | | | | 0.1* |
| fenoxycarb | | | | | 0.05* | | | | 0.05* |
| fenpropathrin | | | | | 0.5 | | | | 0.02* |
| fenpropimorph | | | | | 0.1 | | | | 10 |
| fenpyroximate | | | | 10 | 15 | 10 | 10 | 10 | 10 |
| fentin | | | | | 0.5 | | | | 0.1* |
| fenvalerate | | | | | 5 | | | | 0.1* |
| ferric phosphate | | | | exempt | | | | | NL |
| fipronil | | | | | 0.002* | | | | 0.01* |
| flazasulfuron | | | | | 0.02* | | | | 0.02* |
| flonicamid | | 7 | | 7 | 5 | 2 | 7 | | 2 |
| fluazifop-P butyl | 0.05 | | | | 0.05 | | | | 0.1 |
| flucythrinate | | | | | 10 | | | | 0.1* |
| flumioxazin | | | | 0.05 | | 0.1* | 0.05 | | 0.1* |
| fluometuron | | | | | 0.02* | | | | 0.02* |
| fluoride ion | | | | | | | | | 10 |
| fluoroimide | | | | | 0.04 | | | | default |
| fluridone | | | | | 0.1 | | | | default |
| fluroxypyr | | | | | 0.1* | | | | 0.1* |
| fluvalinate | | | | | 10 | | | | see tau-fluvalinate (10) |
| folpet | | | | 120 | 120 | 150 | 120 | | 150 |
| formothion | | | | | 0.05* | | | | 0.05* |
| fosetyl aluminium | | | | 45 | 1440 | 1500 | 45 | | 1500 |
| furathiocarb | | | | | 5 | | | | 5 |
| furfural | | | | | | | | | 1 |
| Gibberellic acid | | | | | | | | | 5 |
| glufosinate ammonium | 1 (T) | | | | 0.2 | | | | 0.1* |
| glyphosate | 0.1* | | | 7 | 0.1 | 0.1* | 7 | | 0.1* |
| Haloxypop | | | | | 0.02* | | | | 0.05 |
| heptachlor | | | | | 0.01* | | | | 0.02* |
| HCB | | | | | 0.02* | | | | 0.02* |
| hexaconazole | | | | | 0.05* | | | | 0.05* |

| Chemical | Australia | Canada | China | Hong Kong | Japan | South Africa | US | WHO | EU |
|--|-----------|--------|-------|-----------|-------|--------------|-----|-----|---------|
| hexythiazox | | | | 2 | 30 | 20 | 2 | 2 | 20 |
| hydrogen cyanide | | | | | 1 | | | | default |
| hydrogen phosphide (phosphine) | 0.01* | | | | 0.01 | 0.02* | | | 0.02* |
| hydroprene | | | | | | | 0.2 | | default |
| hymexazol | | | | | 0.02 | | | | 0.05* |
| Imazalil | | | | | 0.1* | | | | 0.1* |
| imazaquin | | | | | 0.05 | | | | 0.05* |
| imazethapyr ammonium | | | | | 0.05 | | | | default |
| imidacloprid | 10 (T) | | | 10 | 7 | 10 | 6 | 10 | 10 |
| iminocladine | | | | | 0.02 | | | | default |
| iprodione | | | | | 0.1* | | | | 0.1* |
| isouron | | | | | 0.02 | | | | default |
| isoxaben | 0.01* | | | | | | | | 0.05 |
| Kresoxim-methyl | | | | | 0.1* | | | | 0.1* |
| Lambda cyhalothrin | | 0.01* | | | 10 | 10 | 10 | | 10 |
| lindane | | | | | 0.05* | | | | 0.05* |
| linuron | | | | | 0.02* | | | | 0.1* |
| Malathion | | | | 1 | 1 | 0.02* | 1 | | 0.02* |
| maleic hydrazide | | | | | 0.2* | | | | 0.5* |
| mancozeb | | | | | 30 | | | | 25 |
| mandipropamid | | 18 | | 50 | 50 | 50 | 50 | | 50 |
| MCPA | | | | | | | | | 0.1* |
| mecarbam | | | | | 0.1* | | | | 0.1* |
| metalaxyl | | 8 | | 10 | | | | 10 | |
| metalaxyl-M | | | | | 10 | 10 | 20 | | 10 |
| metaldehyde | | | | | | | | | 0.05* |
| methacrifos | | | | | 0.1* | | | | 0.1* |
| methamidophos | 5 | | | | 5 | | | | 0.02* |
| methidathion | | | | 5 | 5 | | | 5 | 0.1* |
| methiocarb | | | | | | | | | 0.1* |
| methomyl | 0.5 | | | | 8 | | | | 10 |
| methoxychlor | | | | | 0.1* | | | | 0.1* |
| metribuzin | | | | | 0.1* | | | | 0.1* |
| MGK 264 (n-octyl bicycloheptene dicarboximid | | | | | | | 5 | | |

| Chemical | Australia | Canada | China | Hong Kong | Japan | South Africa | US | WHO | EU |
|----------------------|-----------|--------|-------|-----------|-------|--------------|------|-----|---------|
| milbemectin | | | | | 0.1 | | | | 0.1* |
| molinate | | | | | 0.02* | | | | 0.1* |
| monolinuron | | | | | 0.1* | | | | 0.1* |
| myclobutanil | | | | 2 | 10 | 2 | 10 | 2 | 2 |
| Naled | | | | 0.5 | 0.1 | | 0.5 | | default |
| nitenpyram | | | | | 0.03 | | | | default |
| novaluron | | | | | | 0.01* | | | 0.01* |
| norflurazon | | | | 3 | 3 | | 3 | | default |
| Oxadiazon | | | | | | | | | 0.05* |
| oxine-copper | | | | | 10 | | | | default |
| oxydemeton-methyl | | | | | 0.05 | | | | 0.02* |
| paraquat | 0.2 | | | 0.5 | 0.2 | 0.1 | 0.5 | 0.1 | 0.05* |
| parathion | | | | | 0.6 | | | | 0.1* |
| parathion methyl | | | | | 0.05 | | | | 0.05* |
| penconazole | | | | 0.5 | 0.5 | | | 0.5 | 0.5 |
| pendimethalin | 0.1* | | | | | | | | 0.1* |
| permethrin | | | | 50 | 50 | | | 50 | 0.1* |
| d-phenothrin | | | | | 0.02 | 0.05* | 0.01 | | 0.05* |
| phorate | | | | 2 | 0.3 | 0.1* | 2 | | 0.1* |
| phoxim | | | | | 0.02* | | | | 0.02* |
| pindone | | | | | 0.001 | | | | default |
| pirimicarb | 0.5 | | | | 0.5 | | | | 4 |
| pirimiphos-methyl | | | | | 0.05* | | | | 0.05* |
| probenazole | | | | | 0.03 | | | | default |
| prochloraz | | | | | 0.1* | | | | 0.1* |
| procymidone | | | | | 0.1* | | | | 0.1* |
| profenofos | | | | | 0.1* | | | | 0.1* |
| prohexadione calcium | | | | | 0.1* | | | | 0.1* |
| propargite | 3 | 30 | | 100 | 100 | 100 | 100 | 100 | 100 |
| propiconazole | | | | | 0.1* | | | | 0.1* |
| propineb | | | | | 30 | | | | 25 |
| propoxur | | | | | 0.1* | | | | 0.1* |
| propyzamide | | | | | 0.05 | | | | 0.05* |
| pymetrozine | | 6 | | 6 | 15 | 15 | 6 | | 15 |
| pyraclostrobin | | 23 | | 15 | 15 | 15 | 23 | 15 | 10 |
| pyrazolynate | | | | | 0.02* | | | | default |
| pyrazophos | | | | | 0.1* | | | | 0.1* |

| Chemical | Australia | Canada | China | Hong Kong | Japan | South Africa | US | WHO | EU |
|-------------------|-----------|--------|-------|-----------|--------|--------------|-----|-----|---------|
| pyrethrins | | | | | 0.05 | 0.5 | | | 0.5 |
| pyridaben | | | | 10 | 10 | 10 | 10 | | 10 |
| pyriproxyfen | | | | | | 0.05* | | | 0.05* |
| Quinalfos | | | | | 0.1* | | | | 0.1* |
| quinoxifen | | 2.5 | | 1 | 1 | 1 | 3 | 1 | 0.5 |
| quintozene | | | | | 0.05 | | | | 0.05* |
| Resmethrin | | | | | 0.2 | 0.2* | | | 0.2* |
| Spinetorum | | | | | | 0.1* | 22 | | 0.1* |
| spinosad | | | | | | 22 | 22 | | 22 |
| spirodiclofen | | 40 | | 40 | | 40 | 30 | 40 | 40 |
| spirotetramet | | 10 | | 15 | 15 | 15 | 10 | 15 | 15 |
| spiroxamine | | | | 50 | 50 | 0.1* | 50 | | 0.1* |
| sulfentrazone | | | | | 0.05 | | | | default |
| sulphur | | | | exempt | | | | | NL |
| Tau-fluvalinate | | | | | 10 | | | | 10 |
| tebuconazole | | | | 35 | 30 | 40 | 35 | 30 | 30 |
| tebufenoxide | | | | | | | | | 0.1 |
| tebufenpyrad | | | | | | | | | 0.5 |
| tebuthiuron | | | | | 0.02* | | | | default |
| tecnazene | | | | | 0.1* | | | | 0.1* |
| teflubenzuron | | | | | 0.02* | | | | 0.05* |
| tepraloxydim | | | | | 0.05* | | | | 0.1* |
| terbufos | | | | | 0.005* | | | | 0.01* |
| tetradifon | 5 | | | | 60 | | | | 0.05* |
| thiabendazole | | | | | 0.1* | | | | 0.1* |
| thiacloprid | | | | | | | | | 0.1 |
| thiamethoxam | | 0.1 | | | 0.1 | 0.1 | 0.1 | | 0.1 |
| thiodicarb | | | | | 8 | | | | 10 |
| thiometon | | | | | 0.2 | | | | default |
| tolyfluanid | | | | 50 | 50 | | | 50 | 50 |
| triadimefon | | | | | 10 | | | | |
| triadimenol | | | | | 5 | | | | 10 |
| triazolyl alanine | | 2 | | | | | | | default |
| triclopyr | | | | | 0.03* | | | | 0.1* |
| tricyclazole | | | | | 0.02* | | | | 0.05* |
| tridemorph | | | | | 0.1* | | | | 0.1* |

