

Cartap, Thiocyclam and Bensultap

Commodity	MRL (renewed) ppm	MRL (previous) ppm
Rice (brown rice)	○ 0.3	0.2
Wheat	●	0.2
Barley	●	0.2
Rye	●	0.2
Corn (maize, including pop corn and sweet corn)	● 0.1	0.2
Buckwheat	●	0.2
Other cereal grains ¹	0.2	0.2
Potato	0.1	0.1
Taro	0.1	0.1
Sweet potato	● 0.05	0.1
Japanese yam (including Chinese yam)	●	0.1
Konjac	●	0.1
Other potatoes ²	●	0.1
Sugar beet	○ 0.2	
Japanese radish, roots (including radish)	● 0.5	3
Japanese radish, leaves (including radish)	3	3
Turnip, roots (including rutabaga)	●	3
Turnip, leaves (including rutabaga)	●	3
Horseradish	●	3
Watercress	●	3
Chinese cabbage	● 2	3
Cabbage	● 0.7	3
Brussels sprouts	●	3
Kale	●	3
Komatsuna (Japanese mustard spinach)	●	3
Kyona	●	3
Qing-geng-cai	● 2	3
Cauliflower	●	3
Broccoli	● 2	3
Other cruciferous vegetables ³	● 1	3
Burdock	●	3
Salsify	●	3
Artichoke	●	3
Chicory	●	3
Endive	●	3
Shungiku	● 0.8	3
Lettuce (including cos lettuce and leaf lettuce)	● 2	3
Other composite vegetables ⁴	● 0.5	3
Onion	● 0.2	3

Commodity	MRL (renewed) ppm	MRL (previous) ppm
Welsh (including leek)	○ 5	3
Garlic	●	3
Nira	● 1	3
Asparagus	● 0.7	3
Multiplying onion (including shallot)	● 0.7	3
Other liliaceous vegetables ⁵	●	3
Carrot	●	3
Parsnip	●	3
Parsley	●	3
Celery	○ 15	3
Mitsuba	●	3
Other umbelliferous vegetables ⁶	●	3
Tomato	●	3
Pimiento (sweet pepper)	●	3
Egg plant	●	3
Other solanaceous vegetables ⁷	●	3
Cucumber (including gherkin)	●	3
Pumpkin (including squash)	●	3
Oriental pickling melon (vegetable)	●	3
Water melon	●	3
Melons	●	3
Makuwauri melon	●	3
Other cucurbitaceous vegetables ⁸	●	3
Spinach	3	3
Bamboo shoots	●	3
Okra	●	3
Ginger	● 0.2	3
Peas, immature (with pods)	3	3
Kidney beans, immature (with pods)	● 2	3
Green soybeans	●	3
Button mushroom	●	3
Shiitake mushroom	●	3
Other mushrooms ⁹	●	3
Other vegetables ¹⁰	● 1	3
Unshu orange, pulp	●	3
Citrus natsudaidai, whole	●	3
Lemon	●	3
Orange (including navel orange)	●	3
Grapefruit	●	3
Lime	●	3
Other citrus fruits ¹¹	●	3

Commodity	MRL (renewed) ppm	MRL (previous) ppm
Apple	●	3
Japanese pear	●	3
Pear	●	3
Quince	●	3
Loquat		3
Loquat (whole commodity after removal of stems)	0.4	
Peach	●	3
Nectarine	●	3
Apricot	●	3
Japanese plum (including prune)	●	3
Mume plum	●	3
Cherry	●	3
Strawberry	●	3
Raspberry	●	3
Blackberry	●	3
Blueberry	●	3
Cranberry	●	3
Huckleberry	●	3
Other berries ¹²	●	3
Grape	● 2	3
Japanese persimmon	● 0.4	3
Banana	●	3
Kiwifruit		3
Kiwifruit (whole commodity)	6	
Papaya	●	3
Avocado	●	3
Pineapple	●	3
Guava	●	3
Mango	●	3
Passion fruit	●	3
Date	●	3
Other fruits ¹³	●	3
Sunflower seeds	●	3
Sesame seeds	●	3
Safflower seeds	●	3
Cotton seeds	●	3
Rapeseeds	●	3
Other oil seeds ¹⁴	●	3
Ginkgo nut	●	3
Chestnut	● 0.03	3
Pecan	●	3

Commodity	MRL (renewed) ppm	MRL (previous) ppm
Almond	●	3
Walnut	●	3
Other nuts ¹⁵	●	3
Tea	30	30
Hop	10	10
Other spices ¹⁶	●	3
Other herbs ¹⁷	● 1	3

● : Commodities for which MRLs are lowered. These MRLs are to be taken effect on 26 March 2022.

○ : Commodities for which MRLs are raised. These MRLs have been taken effect on 26 March 2021.

Note: The residue definition is sum of Cartap hydrochloride, Cartap, Thiocyclam hydrogen oxalate, Thiocyclam, Bensultap, metabolite A [*N,N*-dimethyl-1,2-dithiolan-4-amine] and Metabolites that are hydrolyzed and oxidized into metabolite A under basic conditions, expressed as Cartap hydrochloride .

* The uniform limit 0.01 ppm is applied to commodities for which renewed MRLs are not given in this table and to commodities not listed above.

* Shaded figures indicate provisional MRLs.

* Diagonal lines mean food categories to which MRLs apply are not set.

* The MRLs in food categories, "Loquat" and "Kiwifruit" are abolished, whereas new MRLs are established in food categorized as "Loquat (whole commodity after removal of stems)" and "Kiwifruit (whole commodity)" , respectively followed by the current food category system for MRLs for agricultural and veterinary chemicals in Japan (These MRLs are to be taken effect on 26 March 2022).

1. "Other cereal grains" refers to all cereal grains, except rice (brown rice), wheat, barley, rye, corn (maize) and buckwheat.
2. "Other potatoes" refers to all potatoes, except potato, taro, sweet potato, yam and konjac.
3. "Other cruciferous vegetables" refers to all cruciferous vegetables, except Japanese radish roots and leaves (including radish), turnip roots and leaves, horseradish, watercress, Chinese cabbage, cabbage, brussels sprouts, kale, komatsuna (Japanese mustard spinach), kyona, qing-geng-cai, cauliflower, broccoli and herbs.
4. "Other composite vegetables" refers to all composite vegetables, except burdock, salsify, artichoke, chicory, endive, shungiku, lettuce (including cos lettuce and leaf lettuce) and herbs.
5. "Other liliaceous vegetables" refers to all liliaceous vegetables, except onion, welsh (including leek), garlic, nira, asparagus, multiplying onion and herbs.
6. "Other umbelliferous vegetables" refers to all umbelliferous vegetables, except carrot, parsnip, parsley, celery, mitsuba, spices and herbs.
7. "Other solanaceous vegetables" refers to all solanaceous vegetables, except tomato, pimiento (sweet pepper) and egg plant.

8. "Other cucurbitaceous vegetables" refers to all cucurbitaceous vegetables, except cucumber (including gherkin), pumpkin (including squash), oriental pickling melon (vegetable), watermelon, melons and makuwauri melon.
9. "Other mushrooms" refers to all mushrooms, except button mushroom and shiitake mushroom.
10. "Other vegetables" refers to all vegetables, except potatoes, sugar beet, sugarcane, cruciferous vegetables, composite vegetables, liliaceous vegetables, umbelliferous vegetables, solanaceous vegetables, cucurbitaceous vegetables, spinach, bamboo shoots, okra, ginger, peas (with pods, immature), kidney beans (with pods, immature), green soybeans, mushrooms, spices and herbs.
11. "Other citrus fruits" refers to all citrus fruits, except unshu orange, citrus natsudaidai, lemon, orange (including navel orange), grapefruit, lime and spices.
12. "Other berries" refers to all berries, except strawberry, raspberry, blackberry, blueberry, cranberry and huckleberry.
13. "Other fruits" refers to all fruits, except citrus fruits, apple, Japanese pear, pear, quince, loquat, peach, nectarine, apricot, Japanese plum (including prune), mume plum, cherry, berries, grape, Japanese persimmon, banana, kiwifruit, papaya, avocado, pineapple, guava, mango, passion fruit, date and spices.
14. "Other oil seeds" refers to all oil seeds, except sunflower seeds, sesame seeds, safflower seeds, cotton seeds, rapeseeds and spices.
15. "Other nuts" refers to all nuts, except ginkgo nut, chestnut, pecan, almond and walnut.
16. "Other spices" refers to all spices, except horseradish, wasabi (Japanese horseradish) rhizomes, garlic, peppers chili, paprika, ginger, lemon peels, orange peels (including navel orange), yuzu (Chinese citron) peels and sesame seeds.
17. "Other herbs" refers to all herbs, except watercress, nira, parsley stems and leaves, celery stems and leaves.