



Closer™

Mandarin

Information for Growers in South Africa

Closer™ (Isoclast™Active (sulfoxaflor)) is an innovative new insecticide highly effective on economically important and difficult-to-control sap-feeding pests including those resistant to other classes of insecticides. Isoclast™Active can support farmers in the control of aphids, mealybugs, scale insects and whiteflies affecting pome and stone fruit, citrus and many vegetables. Isoclast™Active is effective at low use rates, presents an excellent knockdown and long-lasting control, and fits in IPM programs for minimal impact on beneficial insects and predatory mites.

The Maximum Residue Levels (MRLs) and import tolerances (Table 1.) are established for the active ingredient, sulfoxaflor, in many export markets. MRLs and import tolerances are standards set by government authorities. These values serve to indicate that a crop protection product is applied in accordance with the registered label and are set significantly below any toxicological threshold for dietary intake. In setting these standards, government authorities review large data packages, including field residue studies.

Table 1. MRLs and import tolerances for sulfoxaflor in mandarin and estimated days between final application and earliest harvest

Country	MRL (mg/kg) ^{1,2}	Estimated time (days) between final application and earliest harvest to be below MRL and meet label directions ³
South Africa	0.8	21
EU	0.8	21
USA	0.7	21
Canada	0.7	21
Japan	2	21
Korea	1	21
Codex ⁴	0.8	21

¹ Information from bryanchristie.com for mandarin – 31st August 2020

² Residue definition: EU Residue definition for monitoring purposes is given as sulfoxaflor.

³ It is important to always follow label directions, including minimum Pre-Harvest Interval (PHI) days and no open field in-flowering applications.

⁴ Codex MRLs may be accepted by many countries including Brazil, Colombia, Saudi Arabia and United Arab Emirates

To offer more details on the residue profile:

- From the results of 3 field trials conducted in Europe and Australia, following 1-4 applications with 93-191 g as/ha at growth stage BBCH 73-89 (some fruits slightly yellow: beginning of physiological fruit drop - Fruit ripe for consumption), the residues 21 days after the last application were below 30% EU and South Africa MRL.



In addition residue data on citrus has been utilized to calibrate a predictive model to estimate residue behaviour in mandarin. Results are reported in Table 2.

Table 2: Results of R-Cast Predictive Model

R-Cast Predictive Model Assessment from Regulatory Data ¹		
Crop Detail Requested:	Mandarin	
Residue Data ²	40 Citrus trials from Europe, United States, Australia and Brazil	
Desired Residue Level (mg/kg):	<0.01	
Time estimated to reach desired residue (days) following last application	# of Applications	Use rate (g ai / ha)
195	1	120
221	2 (21 days apart)	120
235	2 (21 days apart)	150
223	1	210
244	1	300
Not applicable	3 (21 days apart)	300

¹ Please be aware that this information should only be used as an indication of residue behavior and that residue analysis will be required to confirm residues on any treated crop

² If applications are made prior to fruit formation, this estimation tool is incapable of predicting the resulting residues on the fruit.

Precautions

- Growers should note that suitable MRLs and import tolerances may not be established in all markets for produce treated with Closer™.
- If you are growing produce for export, please confirm the latest information on MRLs, import tolerances, and residue definitions before using this product.
- Residue data are highly variable due to a large variety of agricultural practices and application technology. Growers that export treated crops should consider residue testing prior to shipment.
- Please contact your local sales representative for more information.

For more information

Additional information regarding MRLs is available online at the following sites:

- USA: www.epa.gov/pesticide-tolerances
- Canada: <https://pr-rp.hc-sc.gc.ca/mrl-irm/index-eng.php>
- CODEX: www.codexalimentarius.net/mrls/pestdes/jsp/pest_q-e.jsp
- EU: <https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=homepage&language=EN>

Global: www.bryantchristie.com

Global: www.bryantchristie.com

Please connect with us at my.corteva.com/CoNNEXT

The information provided herein is provided gratis, and solely as an initial reference. While Corteva Agriscience believes the information contained herein is reasonably accurate, it may not reflect the most current information on MRLs (or any other information presented). Therefore, the information is not intended to be, nor shall it be any grower's or exporter's sole and exclusive source of information on the subject matter. Any grower and/or exporter should be sure to check the specific circumstances with respect to crop protection products and crops or processed foods in the country or countries where they intend to ship such products. Because importing countries can and do change regulations on specific MRLs and other import requirements, Corteva Agriscience makes no warranty, or other representation, express or implied, as to the accuracy of any information contained herein, and cannot assume responsibility or liability for reliance on or use of this information by any grower and/or exporter in making specific product use decisions, which in all cases is the responsibility of the product user.