



Closer™

Orange

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 orange 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	0.7	21
Codex ⁴	0.8	21

¹ Information from bryantchristie.com for orange – 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 17 field trials conducted in Europe, Brazil, United States and Australia following 1-4 application with 94-207 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 50% EU and South Africa MRL.





In addition residue data on citrus has been utilized to calibrate a predictive model to estimate residue behaviour in orange. 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:	Orange	
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)
164	1	120
180	2 (21 days apart)	120
189	2 (21 days apart)	150
183	1	210
197	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-lrm/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

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

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