

## EXPORT CITRUS POST-HARVEST TREATMENT DECLARATIONS AND LABELLING CONSIDERATIONS

Post-harvest treatments are utilized to counteract the pre-harvest, harvest and post-harvest factors that compromise fruit quality, thus enabling citrus exporters to present high quality fruit to customers in distant markets. The combination of South African registered treatments, permitted for use on export citrus, is determined by the receiving country, typically described in their food safety regulations. Compliance across a range of markets is challenging because the importing country's rules are becoming increasingly more unique and specific, and they are changing more rapidly, sometimes mid-way through the export season.

It is the intent of this communication to update (following the previous Cutting Edge No. 342 on this topic) and summarize these post-harvest treatment labelling requirements for key markets, taking into consideration recent new product registrations and practical arrangements. Sanitizers and plant growth regulators are not considered in this document, because for many countries these are handled in different legislation to the post-harvest treatments, and are not generally required to be declared on the carton, however, information on these is available from CGA.

This communication is based on the assumption that the post-harvest treatments are used legally (i.e. according to the appropriate registration for that product and where such a treatment and residues are suitable for the intended market), and therefore can be declared as such. It is difficult to represent all the requirements in a single communication, so if any uncertainty remains, CGA ([pb@cga.co.za](mailto:pb@cga.co.za)) should be contacted.

### Post-harvest treatment labelling recommendations

1. In general, labelling of post-harvest treatments should preferably be on the business-end label and **not** on the carton itself. Carton manufacturers and label providers have been advised on the implications of this requirement.
2. Post-harvest treatment indications on separate stickers are not recommended (i.e. it is better on the composite business-end label) as import inspectorates are generally averse to the sticker applications for official purposes.

3. There is great value in having a common statement (wording) per market to reduce the possibility of confusion in the market and to eliminate the potential for receivers to use labelling as a competitive tool between exporters. Where applicable, the recommended declarations here should be adopted in order to bring about uniform labelling conventions. There is evidence that buyers in some markets threaten to use post-harvest declarations as a means to differentiate between exporters, despite the negative impact this might have on long-term sustainability.
4. The use of the term "AND/OR" must be replaced with "AND" where two or more treatments are used. The current wording in the SA Citrus Export Standards published by DALRRD: FSQA is: *"If the citrus fruit concerned have been post-harvest treated with a preserving agent or other chemical substances, it shall be indicated on the business side of the container, preceded by the expression "Treated with".*
5. Vegan waxes
6. Considerations have been given to the vegan wax requirements and included in this document. All actives used in waxes must comply with purity criteria. As from 1 January, 2024 all products containing shellac will no longer be Vegetarian Society Approved in the UK. The *Recommended Usage Restrictions for Plant Protection Products on Southern African Export Citrus* published by CGA/CRI remain applicable.

### Specific comments on post-harvest treatment declarations

1. **United Kingdom:** "AND/OR" should not be used in the post-harvest declarations.
2. **Russia:** While the implementation of additional food safety and recycling labelling requirements are variable across Russian receivers, the overall recommendation is to include these symbols for food safety and recycling respectively (see Annex 1).
3. **India:** Great care must be taken when shipping citrus to India given the array of challenges that present themselves to exporters on fruit arrival. These challenges include: 1) Ongoing modernization of the

Indian Food Safety Laws and particularly the institutional arrangements around publishing applicable tolerances for plant protection products, resulting in uncertainty about the applicable MRLs, 2) Carnauba and Shellac waxes are permissible while Oxidized Polyethylene wax is not permitted, 3) MRLs can be problematic (with special sensitivity to thiabendazole) and 4) different interpretations of these rules at different ports of entry. In fact, the Indian tolerances are among the most restrictive, and exporters sending fruit to this market are encouraged to engage with CGA to obtain more detail on the requirements to avoid any consignment rejections. CGA engagement with DALRRD and PPECB has tried to ensure consistent application of the approach for declarations for the Indian market.

4. **Japan:** Firstly, all post-harvest treatments must be listed as “food additives” under Japanese law in order to be used in a post-harvest context – the list of approved food additives is available from CGA. Secondly, some exporters had fruit rejected in Japan when post-harvest treatment residues were **not** detected, while the carton displayed the standard declaration. In trying to avoid this problem, some exporters have used specific declarations. The citrus industry needs to be aware that the use of alternative declarations undermines the ability of the citrus sector to simplify the export process and introduces a major risk that buyers will begin requesting their own set of declarations, which in turn could lead to competitive behaviour on the basis of fewer active ingredients. Great care must be taken so these negative outcomes are avoided. Nevertheless, it does seem inevitable that standardized wording will not work in all situations.
5. **South Korea:** The Positive List System (PLS) applied as of 1 January, 2019. As such, a 0.01 mg/kg default tolerance applies when there is no established MRL in the Korean Food Code. This change is relevant if treatments lead to detectable residues, and must be consistent with the declaration being made on the carton.

The table below summarizes the requirements per market.



**Table 1: Summary of post-harvest treatment declarations per market.**

Active Substance	SA	EU	Great Britain <sup>a</sup>	Japan	India	USA	Canada	Taiwan	CODEX	South Korea	Russia	Other
<b>Fungicides (Authorized Usages)</b>												
<b>Azoxystrobin</b>	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Unclear	"No" for China
<b>Fludioxonil</b>	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Unclear	
<b>Guazatine</b>	Yes	No	No	No	Yes	No	No	Yes	Yes	No	Yes	
<b>Imazalil</b>	Yes	Yes	Yes	Yes	No <sup>b</sup>	Yes	Yes	Yes	Yes	Yes	Yes	
<b>Prochloraz</b>	Yes	No	No	No	No	No	No	No	Yes	Soft citrus only	Unclear	
<b>Propiconazole</b>	Yes	No	No	Yes	No	Yes	Yes	Yes for oranges, lemons and grapefruit.	Yes	Yes	Unclear	"No" for Hong Kong, Vietnam, GSO countries
<b>Pyrimethanil</b>	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	
<b>SOPP</b>	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Unclear	
<b>Thiabendazole</b>	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	
<b>Recommended standardized wording (where applicable)</b>	Treated with: Imazalil, Thiabendazole and Pyrimethanil	Treated with: Imazalil, Thiabendazole and Pyrimethanil	Treated with: Imazalil, Thiabendazole and Pyrimethanil	Treated with: Imazalil and Thiabendazole or Treated with: Imazalil, Pyrimethanil and Thiabendazole	None <sup>b</sup>	Treated with: Imazalil, Thiabendazole and Pyrimethanil	Treated with: Imazalil, Thiabendazole and Pyrimethanil	Treated with: Imazalil, Thiabendazole and Pyrimethanil	Treated with: Imazalil, Thiabendazole and Pyrimethanil	Treated with: Imazalil, Thiabendazole and Pyrimethanil	Treated with: Imazalil, Thiabendazole and Pyrimethanil	Treated with: Imazalil, Thiabendazole and Pyrimethanil



Waxes												
	SA	EU	Great Britain <sup>a</sup>	Japan	India	USA	Canada	Taiwan	CODEX	South Korea	Russia	Other
<b>Carnauba (E903)</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No <sup>c</sup>	Yes	Yes	Yes	
<b>Shellac (E904)</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
<b>Oxidized Polyethylene (E914)</b>	Yes	Yes	Yes	No	No	Yes	No	Unclear	No	No	Yes	
<b>Recommended standardized wording (where applicable)</b>	Treated with: E903, E904 & E914	Treated with: E903, E904 & E914	Treated with: E903, E904 & E914	Treated with: E903 & E904	Treated with: Carnauba & Shellac	Treated with: E903, E904 & E914	Treated with: E903 & E904	Treated with: E904	Treated with: E903 & E904	Treated with: E903 & E904	Treated with: E903, E904 & E914	
<b>Use of codes (e.g. E904) in declaration</b>	Permitted	Permitted	Permitted	Permitted	Not Permitted	Presumed Permitted	Presumed Permitted	Presumed Permitted	Permitted	Presumed Permitted	Presumed Permitted	
Further Information												
<b>Legislation</b>	Agricultural Products Standards Act, 1990 (Act No.119 of 1990) Standards and Requirements Regarding Control of the Export of Citrus Fruit	Reg. EC/1333/2008 (Food Additives), Reg. No. 231/2012 (specifications for food additives), Reg. EC/1221/2008 (Citrus Marketing Standards), Reg. EC/396/2005 (MRLs)	Reg. EC/1333/2008 (Food Additives), Reg. No. 231/2012 (specifications for food additives), Reg. EC/1221/2008 (Citrus Marketing Standards), Reg. EC/396/2005 (MRLs)	Food Safety Basic Law (Law No. 48 of 2003) and Food Sanitation Act (Act No. 233 of December 24, 1947)	Food Safety and Standards Act, No 34 of 2006. Food Safety and Standards Regulations, 2011	US Code of Federal Regulations Title 21. Part 172.210	Food and Drug Regulations under the Food and Drug Act (1985)		CODEX STANDARD 192-1995		TR TS 005/2011	GB 2736-2021
<b>Other Recommendations</b>											See Annex 1 - Russian Symbols	



July 2023

---

- a: From 1 January 2021, an independent pesticides regulatory regime is in operation in Great Britain (England, Scotland and Wales).
- b: Given the rapid changes to the Indian market requirements for post-harvest declarations, please engage with CGA to confirm the latest declarations prior to shipping.
- c: An application for the use of carnauba wax on citrus fruits was submitted and CGA is awaiting feedback from the Taiwanese authorities.

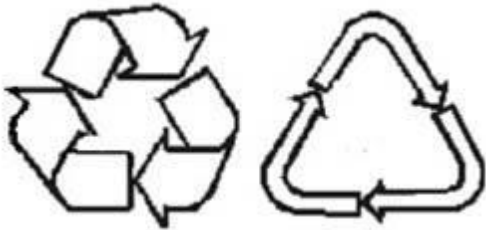
Compiled by  
Paul Hardman and Paula Bester  
July, 2023



July 2023

## ANNEX 1: Russian Symbols

Recycling Indicator



Food Safety Indicator

