

Maximum Residue Limits MRLs

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Different bodies

- Codex alimentarius
- EU MRL database
- US-EPA
- PMRA Canada
- Etcetra...





Codex MRL ('CXL')



- Codex alimentarius: global reference point for consumers, food producers and processors, national food control agencies and the international food trade.
- CCPR: Codex committee on Pesticide Residues; yearly meeting to discuss the MRL proposals from JMPR
- Codex MRL (CXL) is a value taking into account all world-wide uses of a certain pesticide on a certain crop (worst-case will determine MRL).
- No legal basis although in EU most countries Food Safety Authorities will respect Codex MRLs
 http://www.codexalimentarius.net/pestres/data/pesticides/index.html

EU MRLs



MRL Regulation (EC) 396/2005

- Annex I: list of commodities
- Annex II: final MRLs
- Annex III: temporary MRLs (in the process of peer review)
- Annex IV: substances for which no MRL are needed (low toxicity, natural occurrence)
- All information in online database: http://ec.europa.eu/sanco_pesticides/public









EU Pesticide database

http://ec.europa.eu/sanco_pesticides/public

- all crop/MRL combinations
- All Reference values adopted in EU

Active substances		Pesticide EU-MRLs
Regulation (EC) No 1107/2009		Regulation (EC) No 396/2005
Active substance	Directorate General for Health & Consumers	Products Pesticides MRLs updated on 05/10/2011
Disclaimer		

This database is made available solely for the purpose of information. It has no legal value. The Commission declines all responsibility or liability whatsoever for errors or deficiencies in this database. Neither the Commission nor any person acting on behalf of the Commission is responsible with regard to the improper use of the document and its contents. The official MRLs are those published in the Official Journal of the European Union (Plant Protection - Pesticide Residues - Community Legislation).









Searching for MRLs world-wide

International database on MRLs from the New Zealand Food safety authority http://pxmrl.nzfsa.govt.nz

You are here: Home>

New Zealand Food Safety Authority - Pesticide MRL Database

Please select at least two criteria to report on

Country:	Country	
Pesticide:	Pesticide	•
Crop:	Crop	
	Display Limits	



How are MRLs being developed

MRLs have been derived form a set of field trials with clearly defined use:

- Dose level
- Repetitions
- Interval
- Pre harvest interval (PHI)





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Meaning of MRLs

An MRL is connected to

- residue definition containing parent and/or metabolites
- the way it is used:

Crop Dose level Number of applications Interval between applications Dose level Safety interval (pre harvest interval = PHI)

In conclusion

If you don't know the residue definition and the Good Agricultural Practice ('GAP'), an MRL is meaningless.







Import Tolerance (European Union)

'An import tolerance is an MRL which is set for an active ingredient for a crop treated outside the European Union and exported to the European Union'.

Evaluation of

- Residue dossier
- •Toxicology dossier (if not yet available).

*No evaluation of*EnvironmentEcotoxicologyOperator exposure





Import Tolerance residue evaluation

Metabolism* in crops with appropriate crop croup

- leafy vegetable
- fruit/fruiting vegetable
- root/tuber crop
- cereal

- pulses/oilseed crop

Residue field trials

- 4 independent trials (minor crop) or 8 independent trials (major crop) with the crop of interest

- according to guideline and GLP. If no GLP available in country, at least analysis of samples should be performed under GLP.

Storage stability data* if samples stored >30d

* Next page









Import Tolerance residue evaluation (2)

* (previous page) Metabolism study in appropriate crop croup and storage stability data might already be evaluated in EU. In this case, only the requirement for 4 or 8 residue remains.

Agreement in EU

import tolerance will be evaluated by the so called 'Rapporteur Member State' (=country responsible for that particular pesticide). If active substance is not approved in EU, EU Commission will decide on procedure.

Collaboration

- Performing residue trials is expensive. If the import tolerance will be used for export from Ethiopia and for instance Kenia, residue trials from Kenia might also be acceptable
- Evaluation of the dossier by EU experts is expensive.
- Collaboration with countries or pesticide companies or special collaborations like COLEACP (=Comité de Liaison European Afrique, Caribes Pacifiques) is recommended.
- If you need advice on EU import tolerances: email Janhendrik









References

http://www.codexalimentarius.net/pestres/data/pesticides/inde x.html

http://www.efsa.europa.eu/en/publications.htm

http://ec.europa.eu/sanco_pesticides/public

http://pxmrl.nzfsa.govt.nz/

http://www.coleacp.org



Workshop participants: Discussion & choice of MRLs, finding GAPs

MRLs for a crop/pesticide combination are useless unless you know to which label it belongs

- Codex MRL => JMPR evaluation
- EU MRL => EFSA evaluation (from 2005)

.....all databases are limited......

