

## Interpretation guide for phthalimid detection in organic products

From August 26th 2016 a new residue definition of the fungicide Folpet shall apply, including in addition to Folpet also the metabolite Phthalimid ("Folpet: Sum of Folpet and Phthalimid, expressed as Folpet, Regulation (EU) 2016/156). Moreover, Phthalimid is also a metabolite of the insecticide Phosmet (see EFSA reasoned opinion), but nevertheless not included in its residue definition.

As the laboratory circle relana® has shown on the basis of several hundred analysis results via correlations and practical experience of the laboratories and based on a hypothesis developed by Labor Friedle, Phthalimid is produced in many cases without the presence of Folpet or Phosmet. Phthalimid is formed by the ubiquitous chemicals „phthalic acid“ and „phthalic anhydride“ in reaction with primary amino-groups, which are usually part of the food matrix. This happens especially under heating conditions, so that dried products are particularly affected (relana® 2016). Phthalic anhydride is used f.ex. in resins, paintings and newspaper printings and is detected in nearly every (house) dust sample.

**Thus Phthalimid is predominantly not a metabolite of Folpet – contrary to the new residue definition – and therefore does not indicate its application. BNN guideline value for Folpet/Phosmet/Phthalimid is only applicable, when in addition to Phthalimid also Folpet or Phosmet are detected.**

Furthermore, above mentioned information shall be taken into consideration on a case-by-case basis if Folpet or Phosmet are detected as well, because it is not plausible that the entire amount of Phthalimid is derived by the metabolism of Folpet or Phosmet only.

### Literature

relana (2016): POSITION PAPER No. 16 -03 "Phthalimid: Metabolite of Folpet or unavoidable Artefact ?"  
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[http://www.relana-online.de/wp-content/uploads/2016/07/PP\\_16-03\\_Folpet-PI\\_vers20160722.pdf](http://www.relana-online.de/wp-content/uploads/2016/07/PP_16-03_Folpet-PI_vers20160722.pdf)

Commission Regulation (EU) 2016/156 of 18 January 2016 amending Annexes II and III to Regulation (EC) No 396/2005 of the European Parliament and of the Council as regards maximum residue levels for boscalid, clothianidin, thiamethoxam, folpet and tolclofos-methyl in or on certain products (Text with EEA relevance)

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0156&qid=1469718309915&from=EN>

Reasoned opinion on the modification of the existing MRLs for phosmet in citrus fruits, pome fruits and rape seed (EFSA Journal: EFSA Journal 2013;11(12):3510 [33 pp.]

<http://onlinelibrary.wiley.com/doi/10.2903/j.efsa.2013.3510/epdf>

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