

Risk Assessment on Food Contact Materials



"I would like to be honest here... I have tested my products in different labs and, **other things being equal**, I obtained very different results..."

Customer

Can we handle such disparity?
Can we harmonize testing and define standard protocols supported by statistical analysis?



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OUR MANIFESTO

Sometimes in analytics and testing we face problems that seem hard to solve.

We strongly believe that the most efficient way to approach such cases is **statistical problem solving**.

TWO MAIN REASONS:

- «robust» answers to complex problems
- lower costs and less time to get to solutions



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ABOUT US:

- We are a **NETWORK of professionals working in different organizations** such as Universities, Accredited Labs, National Accreditation Bodies, Public and Private Companies.
- We started **sharing technical and analytical problems, knowledge and solutions** years ago, creating over time an «**informal NETWORK**».
- Much of **our work is confidential** and cannot be published due to non-disclosure agreements, but **we can still share a great number of «lessons learned»**.
- In 2017, we decided to make our informal network **visible through a web site** and open it to contributions from other colleagues.



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TOOLS:

- **Each project** we work on is handled by a **specific team of professionals** purposely selected according to that particular topic.
- The setting of the project always refers, when possible, to relevant legislation and applicable standards (e.g.: for interlaboratory studies, we refer to ISO 17043 and ISO 13528).
- When samples are requested (as for interlaboratory trial), we provide **real samples** coming from industrial productions.
- **Anonymity of participants** in interlaboratory trials is ensured by a **specifically designed software**.



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CASE HISTORY

CUSTOMER: Public Authority

SAMPLES: mineral oils in soils

PROBLEM: the Official Standard Method was inadequate, in terms of measurement uncertainty, to determine the conformity of soils with the limits reported in the applicable legislation

SOLUTION: enhancement of the analytical method followed by its validation through an interlaboratory trial (compulsory to maintain accreditation on the specific test)

COMMUNICATION OF RESULTS: limited to the Public Authority personnel only



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CASE HISTORY

CUSTOMER: Private Company (food manufacturer)

SAMPLES: residual solvent in flexible packaging

PROBLEM: investigate the differences between the declarations of the 14 suppliers of flexible packaging and the measurements performed on the incoming goods by the Quality Control laboratory of the Company

SOLUTION: interlaboratory trial with a set of samples purposely manufactured for the trial with a specific level of residual solvent

COMMUNICATION OF RESULTS: the final report was discussed in a meeting between the suppliers and the QC laboratory of the Company



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COLLABORATIVE TRIALS OPEN NOW - BPA

PROBLEM: investigate the uncertainty value in the area of the legislative limit of BPA in food (0,60 ppm – 0,05 ppm)

PROTOCOL: multi-method with a multi-level analysis of repeatability

SAMPLES: 8 samples of 3 different matrices (lyophilized fish muscle, vegetable paste in oil, fish preparation in tube) with “natural” contamination of BPA (not spiked)

COMMUNICATION OF RESULTS: a complete anonymous report, in conformity with ISO 17043 and ISO 13528, will be given to all participants – if possible, single-method results will be processed with a correlation analysis (it depends on the number of participants)

PARTICIPANT FEE: none (free of charge)

CLOSING DATE FOR APPLICATION: 30/04/2017



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COLLABORATIVE TRIALS OPEN NOW - METALS

PROBLEM: investigate the performances of the analytical method, such as uncertainty value, developed as Annex in an ISO Standard Draft – quantification of metals in food contact simulants

PROTOCOL: multi-method with a multi-level analysis of repeatability

SAMPLES: baking / grilling ware and appliances for food contact – samples purposely manufactured for the scope of this trial

COMMUNICATION OF RESULTS: a complete anonymous report, in conformity with ISO 17043 and ISO 13528, will be given to all participants – if possible, single-method results will be processed with a correlation analysis (it depends on the number of participants)

PARTICIPANT FEE: none (free of charge)

CLOSING DATE FOR APPLICATION: 30/06/2017



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WHAT NEXT?

MINERAL OILS are you interested?



WEB SITE ON LINE BY THE END OF MARCH 2017
e-mail info@proficiencyproblemsolving.com