MKL - NEWSLETTER

NMKL - Nordic Committee on Food Analysis

www.nmkl.org - nmkl@vetinst.no - No. 78, June 2011

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NordVal has approved the HyServe method: Compact Dry X-SA for the enumeration of *Staphylococcus aureus* in foods (NordVal Certificate No. 042)

Compact Dry X-SA contains a ready-to-use dry chromogenic medium and selective agents making the method suitable for the detection and enumeration of *Staphylococcus aureus* in foods. The method has been tested in extensive studies where it has been compared with ISO 6888-1. The studies show that the results obtained by Compact Dry X-SA are not statistically significant different from results obtained by the ISO method.



For more details see http://www.nmkl.org/NordVal/Sertifikater/NordVal042-11.pdf

NordVal has approved the HyServe method: Compact Dry YM for the determination of yeast and mould in foods (NordVal Certificate No. 043)

Compact Dry YM contains a ready-to-use dry chromogenic medium and selective agents making the method suitable for the detection and enumeration of yeast and mould in foods. The method has been tested in extensive studies where it has been compared with ISO 21527-1. Both the reference method and the alternative method give the user the opportunity to record results at two time points. Compact Dry YM enables reading after 3 and 7 days. For slower growing fungi, the reading should be carried out after 7 days, for other fungi 3 days might be sufficient. The methods (the alternative method and the reference method) are applicable for levels above 100 cfu/g.



For more details see http://www.nmkl.org/NordVal/Sertifikater/NordVal043-11.pdf

The reference methods used in the NordVal validation studies are methods listed in the EU Directive 2073/2003; Microbiological Criteria. NordVal approved methods are appropriate for use according to food hygiene regulations.

To remove your name from the mailing list, or for any questions or comments, please forward email to <u>nmkl@vetinst.no</u>

NordVal has approved foodproof[®] *Listeria monocytogenes* Detection Kit, Hybridization Probes and foodproof[®] *Listeria monocytogenes* Detection Kit, 5' Nuclease in combination with foodproof[®] ShortPrep II Kit from BIOTECON Diagnostics. (NordVal Certificate No. 025)

The methods are tested in two extensive validation studies. The methods are compared against ISO 11290:1996/Amd 1: 2004 for detection of *Listeria monocytogenes*. The limit of detection for the method is 1-10 cells per 25 g/100 cm². The methods are tested on food and environmental samples. Foodproof[®] *Listeria monocytogenes* Detection Kit, Hybridization Probes and foodproof[®] *Listeria monocytogenes* Detection Kit, 5' Nuclease in combination with foodproof[®] ShortPrep II Kit provide equivalent results as the specified ISO method.



For more details see NordVal Certificate No. 025

NordVal has approved foodproof[®] Salmonella Detection Kit, Hybridization Probes and foodproof[®] Salmonella Detection Kit, 5' Nuclease in combination with foodproof[®] ShortPrep I Kit from BIOTECON Diagnostics. (NordVal Certificate No. 023)

The principles of the methods are real-time PCR and detection with specific, fluorescence labelled probes. The methods are tested in two extensive validations. The methods are compared against ISO 6579:2002 for detection of *Salmonella* spp. in foods, feeds and environmental samples. The limit of detection of the methods are 1-10 cells per 25 g/100 cm², and give equivalent results as the specified ISO method.

For more details see NordVal Certificate No. 023

BAX[®] Salmonella PCR (BAX[®] Classic and BAX[®] Q7) BAX[®] System with Automated Detection PCR Assay for Screening Salmonella (NordVal Certificate No. 030)

BAX® System for detection of *Salmonella* is a kit from OXOID using PCR. The method is applicable for foods, feeds and environmental samples. The method has been compared against ISO 6579:2002. No statistical significant differences are demonstrated in the results obtained by the BAX® system and the ISO method, respectively.

For more details see http://www.nmkl.org/NordVal/Sertifikater/NordVal030-11.pdf

RAPID'E.coli2 (NordVal Certificate No. 020)

RAPID'E.coli2 consists of two chromogenic substrates for the detection of *E.coli* and coliform bacteria in foods. Coliform bacteria others than *E.coli* form blue colonies and *E.coli* forms violet to pink colonies. RAPID'E.coli2 yields equivalent results as ISO 4832:1991 and ISO 16649-2:2001. RAPID'E.coli2 is manufactured by Bio-Rad.

For more details see http://www.nmkl.org/NordVal/Sertifikater/NordVal020-11.pdf





New NordVal Certificates from 3M[™] Petrifilm[™] :

• Aerobic Count Plate (NordVal Certificate No. 012)

3M Petrifilm Aerobic Count Plate contains a sample-ready-culturemedium system, specific nutrients, a cold-water-soluble gelling agent, and a tetrazolium indicator that facilitates colony enumeration. The method has been compared twice with ISO 4833 in extensive studies. The method is also validated collaboratively. The results, obtained on food samples, show that the 3M Aerobic Count Plate and the reference method give equivalent results.

For more details see http://www.nmkl.org/NordVal/Sertifikater/NordVal012-11.pdf

• Coliform Count Plate (NordVal Certificate No. 013)

3M Petrifilm Coliform Count Plate is a ready-culture-medium system and ingredients for the enumeration of coliform bacteria in foods. The method is tested on naturally contaminated samples. It is compared against ISO 4831, ISO 4831 and NF V08-060. No significant statically differences were obtained in the results analysed by the 3M Petrifilm Coliform Count Plate method and the reference methods.

For more details see http://www.nmkl.org/NordVal/Sertifikater/NordVal013-11.pdf

• *E.coli* / Coliform Count Plate (NordVal Certificate No. 014)

3M Petrifilm E.coli / Coliform Count Plate is a ready-culture-medium system and ingredients for the enumeration of *E.coli* and coliform bacteria in foods. *E.coli* are visible as blue colonies with and without gas after 48 h incubation at 37° C, and coliform bacteria appear as red colonies with gas and blue colonies with or without gas after 24 h at 37° C. The method is tested on foods. It is compared against ISO 16649-2. Previously, this 3M method was NMKL Method No. 147. The NMKL Method was withdrawn, not because it did not work well, but because NMKL decided to no longer include proprietary methods in its method collection. Proprietary methods are validated and reviewed by NordVal, a committee included in NMKL.

For more details see http://www.nmkl.org/NordVal/Sertifikater/NordVal014-11.pdf

• Yeast and Mould Count Plate (NordVal Certificate No. 016)

3M Yeast and Mould Count Plate contains a ready-to-use medium and ingredients for the enumeration of mould and yeast in foods. Yeast appear as small blue-green colonies with defined edges, and mould forms big colonies in variable colour with a dark centre and diffuse edges. The method has been validated in a collaborative validation, and is compared against a BAM method.

For more details see http://www.nmkl.org/NordVal/Sertifikater/NordVal016-11.pdf

• Staph Express Count System (NordVal Certificate No. 019)

3M Staph Express Count System consists of Petrifilm Staph Express count plate and Petrifilm Staph Express disk. If no colonies or only red-violet colonies are present after the incubation, count red-violet colonies as *S. aureus*; the test is complete. If colony colours beside red-violet are present, use a Petrifilm Staph Express Disk. Count all pink zones whether or not colonies are present. Pink zones are usually associated with *S. aureus* but may indicate *S. hyicus* or *S. intermedius*. The method has been tested on foods and compared against ISO 6888-1 and ISO 6888-2. No statistical differences in results were obtained in the comparison of the 3MTMPetrifilmTM Staph Express Count System and the reference methods ISO 6888-1 and ISO 6888-2.

For more details see http://www.nmkl.org/NordVal/Sertifikater/NordVal019-11.pdf









Seminar on Sampling, 26 August 2011 at Rick's stuene in Bergen, Norway.

Language: Norwegian Registration: 15 June

The Norwegian National Committee of NMKL organizes a Seminar on Sampling. The seminar is relevant for those involved in sampling (primary and secondary), for analysts who give guidance on sampling, review obtained results and stakeholders who make decisions on the basis of the analytical results. The language of the seminar will be Norwegian. <u>More information (in Norwegian)</u>

NMKL Course: Everything you ever wanted to know about reference materials!

On behalf of NMKL, Lars Jorhem, National Food Administration, Sweden, has held courses in Denmark, Finland, Iceland and Norway. Very positive feedback has been received. Now it is time to arrange the course in Sweden. Do not miss this opportunity! The course will be held **7 September 2011 at the National Food Administration**, Uppsala. The lecturer Lars Jorhem has elaborated the NMKL Procedure No 9: "Evaluation of method bias using certified reference materials" and is a key person in the elaboration of the recovery procedure. Both procedures are about chemical analyses, which will be reflected in the course.

Contents:

- Reference Materials (RM) versus Certified Reference Materials (CRMs): What is the difference?
- ISO Guides and CRMs, EU legislation and CODEX requirement
- Interlaboratory studies: Differences and similarities between certification, validation and proficiency testing
- How are CRMs made?
- "Recovery" and "bias": Relation to CRMS
- Selection, use and misuse of CRM
- Estimation of bias using NMKL Procedure No. 9 (2007)
- A short introduction to measurement uncertainty
- Where to find CRMs and PT programs?

Language: Swedish

Fee: NOK 2000,-Covers lunch, course location and material

Registration: to nmkl@vetinst.no by 1 August 2011



Lars Jorhem, the Lecturer

Available NMKL Procedures

No 1, 2. Ed. 2005	Calibration and performance checking of laboratory balances
No 2, 1995	Performance check and in-house calibration of thermometers
No 3, 1996	Control charts and control materials in internal quality control in food chemical laboratories
No 4, 3. Ed. 2009	Validation of chemical analytical methods
No 5, 2. Ed. 2003	Estimation and expression of measurement uncertainty in chemical analysis
No 6, 1998	Yleiset ohjeet aistinvaraisten laboratorioiden laadunvarmistukseen (avail. Danish/Finnish)
No 7, 1998	Checking of UV/VIS spectrophotometers
No 8, 4. Ed. 2008	Measurement of uncertainty in quantitative microbiological examination of foods
No 9, 2. Ed. 2007	Evaluation of method bias using certified reference materials.
No 10, 2001	Control of microbiological media
No 11, 2. Ed. 2010	Procedure for sensory analysis of drinking water
No 12, 2002	Guide on sampling for analysis of foods
No 13, 2003	Volumetric control
No 14, 2004	SENSVAL: Guidelines for internal control in sensory analysis laboratories
No 15, 2004	Temperature control in microbiological laboratories
No 16, 2005	Sensory quality control
No 17, 2006	Guidelines for requirement specifications for food analyses
No 18, 2006	The use of reference materials, reference strains and control charts in a food microbiological laboratory
No 19, 2007	Guideline for sensorial analysis of food containers/packages
No 20, 2007	Evaluation of results from qualitative methods
No 21, 2008	Guide for sensory analysis of fish and shellfish
No 22, 2008	Considerations regarding evaluation of immunochemical test kits for food analysis
No 23, 2008	Guide on quality assurance in microbiological laboratories (replacing NMKL Report No. 5)
No 24, 2010	Guidelines for quality assurance for food chemical laboratories