



CERTIFICATION

AOAC Research Institute *Performance Tested Methods*SM

Certificate No.
122401

The AOAC Research Institute hereby certifies the method known as:

Easy Plate YM-R

manufactured by

Kikkoman Biochemifa Company
2-1-1, Nishi-shinbashi
Minato-ku, Tokyo 105-0003
Japan

This method has been evaluated and certified according to the policies and procedures of the AOAC *Performance Tested Methods*SM Program. This certificate indicates an AOAC Research Institute Certification Mark License Agreement has been executed which authorizes the manufacturer to display the AOAC Research Institute *Performance Tested Methods*SM certification mark on the above-mentioned method for the period below. Renewal may be granted by the Expiration Date under the rules stated in the licensing agreement.

A handwritten signature in black ink, appearing to read 'Bradley A. Stawick'.

Bradley A. Stawick, Senior Director
Signature for AOAC Research Institute

Issue Date
Expiration Date

December 27, 2024
December 31, 2025

METHOD NAME

Easy Plate YM-R

CATALOG NUMBER

61977

ORIGINAL CERTIFICATION DATE

December 18, 2024

PRINCIPLE OF THE METHOD

Easy Plate YM-R was developed for yeast and mold counts and includes the following four components: a waterproof sheet, a dry medium containing a gelling agent and color indicator system for yeast and mold, a hydrophobic resin ring surrounding the medium, and a transparent cover over the medium. The sample suspension is dispensed into the center of the medium with the cover raised. Thereafter, the cover is gently lowered to evenly spread the suspension and allow it to soak into the medium, which turns into a gel in 3 minutes. Yeast and mold colonies appear purple after incubation at $25 \pm 1^\circ\text{C}$ for $48-72 \pm 2$ hours.

CERTIFIED CLAIM STATEMENT: The Easy Plate YM-R method is certified for the enumeration of yeasts and molds within the scope of Tables 1 and 2.

Table 1. Method Performance Claims

Matrix	Test Portion	Diluent ^a	Incubation of plates		Reference Method	Claim ^b
			Temp	Time		
Fermented yogurt drink	50 g	PW	$25 \pm 1^\circ\text{C}$	48–72 h	ISO 21527-1:2008	Eq
Cream cheese	50 g	PW	$25 \pm 1^\circ\text{C}$	72 ± 3 h	ISO 21527-1:2008	Eq
Vegetable juice	50 g	PW	$25 \pm 1^\circ\text{C}$	48–72 h	ISO 21527-1:2008	Eq
Beetroot salad	50 g	PW	$25 \pm 1^\circ\text{C}$	48–72 h	ISO 21527-1:2008	Eq
Cooked breaded chicken patties	50 g	PW	$25 \pm 1^\circ\text{C}$	48–72 h	ISO 21527-1:2008	Eq
Deli turkey	50 g	PW	$25 \pm 1^\circ\text{C}$	48–72 h	ISO 21527-1:2008	Eq
Quiche (ham and cheese)	50 g	PW	$25 \pm 1^\circ\text{C}$	48–72 h	ISO 21527-1:2008	Eq
Custard tart	50 g	PW	$25 \pm 1^\circ\text{C}$	72 ± 3 h	ISO 21527-1:2008	Eq
Caesar salad	50 g	PW	$25 \pm 1^\circ\text{C}$	48–72 h	ISO 21527-1:2008	Eq
Frozen ready-to-cook pizza	50 g	PW	$25 \pm 1^\circ\text{C}$	48–72 h	ISO 21527-1:2008	Eq
Norwegian style smoked salmon	50 g	PW	$25 \pm 1^\circ\text{C}$	48–72 h	ISO 21527-1:2008	Eq
Dried apricots	50 g	PW	$25 \pm 1^\circ\text{C}$	48–72 h	ISO 21527-2:2008	Eq
Almond butter	50 g	PW	$25 \pm 1^\circ\text{C}$	48–72 h	ISO 21527-2:2008	Eq
Milk chocolate	50 g	PW	$25 \pm 1^\circ\text{C}$	72 ± 3 h	ISO 21527-2:2008	Eq
Cream puffs	50 g	PW	$25 \pm 1^\circ\text{C}$	72 ± 3 h	ISO 21527-2:2008	Eq
Dry dog food	50 g	PW	$25 \pm 1^\circ\text{C}$	48–72 h	ISO 21527-2:2008	Eq
Meat and bone meal	50 g	PW	$25 \pm 1^\circ\text{C}$	48–72 h	ISO 21527-2:2008	Eq
Stainless steel (4" x 4")	Sponge	PW	$25 \pm 1^\circ\text{C}$	48–72 h	ISO 21527-1:2008	Eq

Sealed concrete (1" x 1")	Swab	PW	25 ± 1°C	48–72 h	ISO 21527-1:2008	Eq
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^a PW = 0.1% peptone water^b Eq = Equivalence of candidate and reference methods demonstrated by the 90% confidence interval on difference of means contained entirely within -0.5 to 0.5 log₁₀ using SLV study design from OMA Appendix J (2012) for at least 2 of the 3 levels tested for that matrix.^c Observed DOM was within -0.5 to 0.5 log₁₀, but the 90% CIs did not meet the criterion for equivalence.**Table 2. Method Selectivity**

Diluent ^a	Incubation time	Inclusivity Strains		Exclusivity Species	
		No. Tested	No. Positive	No. Tested	No. Positive
PW	48 h	50 ^b	49 ^c	30 ^d	0
PW	72 h	50 ^b	50	30 ^d	0

^a PW = 0.1% peptone water.^b Comprising 30 species of yeast and 20 species of mold.^c *Eurotrium amstelodami* (DSM 62629) did not show growth at 48 h, but did at 72 h.^d Comprising 10 species of Gram-positive bacteria and 20 species of Gram-negative bacteria.**Table 3. Method History**

No.	Date	Summary	Supporting Data
1	December 2024	Original Certification.	Certification Report