



**ORGANISMO ACREDITADO POR EL ONA**  
**FICHA DE CLIENTE**

<b>NOMBRE</b>	<b>ALVOG S.A en representación de Cambón&amp;Asociados SRL (Uruguay)</b>
<b>TIPO DE ORGANISMO</b>	Laboratorio de Calibración
<b>DIRECCIÓN</b>	Yegros N° 1363 entre 1 <sup>ra</sup> y 2da Proyectada
<b>CIUDAD</b>	Asunción
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**ALCANCE DE LA ACREDITACIÓN CONCEDIDA AL LABORATORIO DE LA EMPRESA ALVOG S.A en representación de CAMBÓN & ASOCIADOS S.R.L (Uruguay), COMO LABORATORIO DE CALIBRACION, DE ACUERDO A LA NORMA NP-ISO/IEC 17025:2006, EQUIVALENTE A LA NORMA ISO/IEC 17025:2005 “REQUISITOS GENERALES PARA LA COMPETENCIA DE LOS LABORATORIOS DE ENSAYO Y CALIBRACION” Y DE LOS REQUISITOS ESTABLECIDOS EN LOS REGLAMENTOS, CRITERIOS Y POLITICAS DEL ONA APLICABLES A LOS LABORATORIOS DE CALIBRACION EN SU VERSION VIGENTE.**

Nº	Ítem de calibración	Normas/ Procedimientos internos	Intervalo o punto de medición	Instalaciones permanentes	Instalaciones del cliente	Incertidumbre (*) ±	Fecha de Acreditación	Fecha de Vencimiento
1	CALIBRACIÓN BALANZA	PCR-01 v07 13/3/2017  INS-08 v10 16/3/17	0 a 10 mg	NA**	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 9,00 \times 10^{-6})\}} (mg)$	26/07/2017	26/07/2020
			11 mg a 20 mg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,88 \times 10^{-5})\}} (mg)$	26/07/2017	26/07/2020
			21 mg a 50 mg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,88 \times 10^{-5})\}} (mg)$	26/07/2017	26/07/2020
			51 mg a 100 mg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 2,84 \times 10^{-5})\}} (mg)$	26/07/2017	26/07/2020

			101 mg a 200 mg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 6,40 \times 10^{-5})\}} (mg)$	26/07/2017	26/07/2020
			201 mg a 500 mg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 7,51 \times 10^{-5})\}} (mg)$	26/07/2017	26/07/2020
			501 mg a 1 000 mg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,17 \times 10^{-4})\}} (mg)$	26/07/2017	26/07/2020
			1 001 mg a 2 000 mg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 2,30 \times 10^{-4})\}} (mg)$	26/07/2017	26/07/2020
			2 001 mg a 5 000 mg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 3,06 \times 10^{-4})\}} (mg)$	26/07/2017	26/07/2020
			5 001 mg a 10 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 4,69 \times 10^{-10})\}} (g)$	26/07/2017	26/07/2020
			11 g a 20 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 9,00 \times 10^{-10})\}} (g)$	26/07/2017	26/07/2020
			21 g a 30 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,11 \times 10^{-9})\}} (g)$	26/07/2017	26/07/2020
			31 g a 50 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,23 \times 10^{-9})\}} (g)$	26/07/2017	26/07/2020
			51 g a 60 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,00 \times 10^{-9})\}} (g)$	26/07/2017	26/07/2020
			61 g a 120 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,88 \times 10^{-9})\}} (g)$	26/07/2017	26/07/2020
			121 g a 160 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 2,84 \times 10^{-9})\}} (g)$	26/07/2017	26/07/2020
			161 g a 200 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 4,44 \times 10^{-9})\}} (g)$	26/07/2017	26/07/2020
			201 g a 220 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 4,90 \times 10^{-9})\}} (g)$	26/07/2017	26/07/2020
			221 g a 300 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 6,40 \times 10^{-9})\}} (g)$	26/07/2017	26/07/2020
			301 g a 310 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 7,80 \times 10^{-9})\}} (g)$	26/07/2017	26/07/2020
			311 g a 320 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 8,10 \times 10^{-9})\}} (g)$	26/07/2017	26/07/2020
			321 g a 400 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,07 \times 10^{-8})\}} (g)$	26/07/2017	26/07/2020

			401 g a 410 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,25 \times 10^{-8})\}} (g)$	26/07/2017	26/07/2020
			411 g a 420 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,36 \times 10^{-8})\}} (g)$	26/07/2017	26/07/2020
			421 g a 500 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,74 \times 10^{-7})\}} (g)$	26/07/2017	26/07/2020
			501 g a 510 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,82 \times 10^{-7})\}} (g)$	26/07/2017	26/07/2020
			511 g a 600 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,97 \times 10^{-7})\}} (g)$	26/07/2017	26/07/2020
			601 g a 610 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 2,06 \times 10^{-7})\}} (g)$	26/07/2017	26/07/2020
			611 g a 620 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 2,09 \times 10^{-7})\}} (g)$	26/07/2017	26/07/2020
			621 g a 820 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 2,47 \times 10^{-7})\}} (g)$	26/07/2017	26/07/2020
			821 g a 900 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 2,67 \times 10^{-7})\}} (g)$	26/07/2017	26/07/2020
			901 g a 1000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 6,94 \times 10^{-7})\}} (g)$	26/07/2017	26/07/2020
			1001 g a 1100 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 8,40 \times 10^{-7})\}} (g)$	26/07/2017	26/07/2020
			1101 g a 1200 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,00 \times 10^{-6})\}} (g)$	26/07/2017	26/07/2020
			1201 g a 1500 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,56 \times 10^{-6})\}} (g)$	26/07/2017	26/07/2020
			1501 g a 2000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 2,78 \times 10^{-6})\}} (g)$	26/07/2017	26/07/2020
			2001 g a 2500 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 4,34 \times 10^{-6})\}} (g)$	26/07/2017	26/07/2020
			2501 g a 2800 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 5,44 \times 10^{-6})\}} (g)$	26/07/2017	26/07/2020
			2801 g a 3000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 6,25 \times 10^{-6})\}} (g)$	26/07/2017	26/07/2020
			3001 g a 3100 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 6,67 \times 10^{-6})\}} (g)$	26/07/2017	26/07/2020

			3101 g a 4000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,11 \times 10^{-5})\}} (g)$	26/07/2017	26/07/2020
			4001 g a 4100 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,17 \times 10^{-5})\}} (g)$	26/07/2017	26/07/2020
			4 101 g a 4 500 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,41 \times 10^{-5})\}} (g)$	26/07/2017	26/07/2020
			4 501 g a 5 000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,74 \times 10^{-5})\}} (g)$	26/07/2017	26/07/2020
			5 001 g a 6 100 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 2,58 \times 10^{-5})\}} (g)$	26/07/2017	26/07/2020
			6 101 g a 6 400 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 2,84 \times 10^{-5})\}} (g)$	26/07/2017	26/07/2020
			6 401 g a 7 200 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 3,60 \times 10^{-5})\}} (g)$	26/07/2017	26/07/2020
			7 201 g a 8 000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 4,44 \times 10^{-5})\}} (g)$	26/07/2017	26/07/2020
			8 001 g a 10 000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 6,94 \times 10^{-5})\}} (g)$	26/07/2017	26/07/2020
			10 001 g a 15 000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,56 \times 10^{-4})\}} (g)$	26/07/2017	26/07/2020
			15 001 g a 16 000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 2,58 \times 10^{-3})\}} (g)$	26/07/2017	26/07/2020
			16 001 g a 20 000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 2,76 \times 10^{-3})\}} (g)$	26/07/2017	26/07/2020
			20 001 g a 25 000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 2,93 \times 10^{-3})\}} (g)$	26/07/2017	26/07/2020
			25 001 g a 30 000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 3,40 \times 10^{-3})\}} (g)$	26/07/2017	26/07/2020
			30 001 g a 32 000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 3,60 \times 10^{-3})\}} (g)$	26/07/2017	26/07/2020
			32 001 g a 35 000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 3,91 \times 10^{-3})\}} (g)$	26/07/2017	26/07/2020
			35 001 g a 40 000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,02 \times 10^{-2})\}} (g)$	26/07/2017	26/07/2020
			40 001 g a 45 000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))]^2 + 1,09 \times 10^{-2})\}} (g)$	26/07/2017	26/07/2020

		45 001 g a 50 000 g	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 1,17 \times 10^{-2}] (g)\}}$	26/07/2017	26/07/2020
		50 001 g a 60 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 2,50 \times 10^{-7}] (kg)\}}$	26/07/2017	26/07/2020
		61 kg a 80 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 4,44 \times 10^{-7}] (kg)\}}$	26/07/2017	26/07/2020
		81 kg a 100 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 6,94 \times 10^{-7}] (kg)\}}$	26/07/2017	26/07/2020
		101 kg a 120 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 1,00 \times 10^{-6}] (kg)\}}$	26/07/2017	26/07/2020
		121 kg a 150 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 1,56 \times 10^{-6}] (kg)\}}$	26/07/2017	26/07/2020
		151 kg a 175 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 2,13 \times 10^{-6}] (kg)\}}$	26/07/2017	26/07/2020
		176 kg a 200 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 2,78 \times 10^{-6}] (kg)\}}$	26/07/2017	26/07/2020
		201 kg a 250 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 4,34 \times 10^{-6}] (kg)\}}$	26/07/2017	26/07/2020
		251 kg a 300 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 6,25 \times 10^{-6}] (kg)\}}$	26/07/2017	26/07/2020
		300 kg a 350 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 8,51 \times 10^{-6}] (kg)\}}$	26/07/2017	26/07/2020
		351 kg a 375 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 9,77 \times 10^{-6}] (kg)\}}$	26/07/2017	26/07/2020
		376 kg a 400 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 1,11 \times 10^{-5}] (kg)\}}$	26/07/2017	26/07/2020
		401 kg a 500 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 1,74 \times 10^{-5}] (kg)\}}$	26/07/2017	26/07/2020
		501 kg a 550 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 2,10 \times 10^{-5}] (kg)\}}$	26/07/2017	26/07/2020
		551 kg a 600 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 2,50 \times 10^{-5}] (kg)\}}$	26/07/2017	26/07/2020
		601 kg a 700 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 3,40 \times 10^{-5}] (kg)\}}$	26/07/2017	26/07/2020
		701 kg a 800 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 4,44 \times 10^{-5}] (kg)\}}$	26/07/2017	26/07/2020

			801 kg a 1 000 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 6,94 \times 10^{-5}]\} (kg)}$	26/07/2017	26/07/2020
			1 001 kg a 1 200 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 1,00 \times 10^{-4}]\} (kg)}$	26/07/2017	26/07/2020
			1 201 kg a 1 300 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 1,17 \times 10^{-4}]\} (kg)}$	26/07/2017	26/07/2020
			1 301 kg a 1 400 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 1,36 \times 10^{-4}]\} (kg)}$	26/07/2017	26/07/2020
			1 401 kg a 1 500 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 1,56 \times 10^{-4}]\} (kg)}$	26/07/2017	26/07/2020
			1 501 kg a 1 600 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 1,78 \times 10^{-4}]\} (kg)}$	26/07/2017	26/07/2020
			1 601 kg a 1 700 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 2,01 \times 10^{-4}]\} (kg)}$	26/07/2017	26/07/2020
			1 701 kg a 1 800 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 2,25 \times 10^{-4}]\} (kg)}$	26/07/2017	26/07/2020
			1 801 kg a 1 900 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 2,51 \times 10^{-4}]\} (kg)}$	26/07/2017	26/07/2020
			1 901 kg a 2 000 kg	NA	X	$2 \times \sqrt{\{2[(d \div (2 \times \sqrt{3}))^2 + 2,78 \times 10^{-4}]\} (kg)}$	26/07/2017	26/07/2020
2	CALIBRACION PESAS	<b>PCR-01 v07</b> <b>13/3/2017</b>  <b>INS-09 v11</b> <b>30/6/2016</b>	1 mg – M1	X	NA	0,067 mg	26/07/2017	26/07/2020
			2 mg – M1	X	NA	0,067 mg	26/07/2017	26/07/2020
			5 mg – M1	X	NA	0,067 mg	26/07/2017	26/07/2020
			10 mg – M1	X	NA	0,083 mg	26/07/2017	26/07/2020
			20 mg – M1	X	NA	0,10 mg	26/07/2017	26/07/2020
			50 mg – M1	X	NA	0,13 mg	26/07/2017	26/07/2020
			100 mg – M1	X	NA	0,17 mg	26/07/2017	26/07/2020
			200 mg – M1	X	NA	0,20 mg	26/07/2017	26/07/2020

		500 mg – M1	X	NA	0,27 mg	26/07/2017	26/07/2020
		1 g – M1	X	NA	0,33 mg	26/07/2017	26/07/2020
		2 g – M1	X	NA	0,40 mg	26/07/2017	26/07/2020
		5 g – M1	X	NA	0,53 mg	26/07/2017	26/07/2020
		10 g – M1	X	NA	0,67 mg	26/07/2017	26/07/2020
		20 g – M1	X	NA	0,83 mg	26/07/2017	26/07/2020
		50 g – M1	X	NA	1,0 mg	26/07/2017	26/07/2020
		100 g – M1	X	NA	1,7 mg	26/07/2017	26/07/2020
		200 g – M1	X	NA	3,3 mg	26/07/2017	26/07/2020
		500 g – M1	X	NA	8,3 mg	26/07/2017	26/07/2020
		1000 g – M1	X	NA	16,7 mg	26/07/2017	26/07/2020
		2000 g – M2	X	NA	100 mg	26/07/2017	26/07/2020
		5000 g – M1	X	NA	83,3 mg	26/07/2017	26/07/2020
		10000 g – M1	X	NA	166,7 mg	26/07/2017	26/07/2020
		20000 g – M1	X	NA	333,3 mg	26/07/2017	26/07/2020
<b>RESPONSABLE TÉCNICO DE LABORATORIO: Sr. Agustín Russi</b>							

\*La incertidumbre expandida de medida informada se expresa como la incertidumbre de medida estándar multiplicada por el factor de cobertura  $k$  con una probabilidad correspondiente al 95%. Esta incertidumbre corresponde a la capacidad de medición y calibración - CMC del laboratorio.

\*\* NA: No Aplica