



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

WORLD SURVEY SERVICES S.A.
Junge #142, Concepción
CHILE
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BIOLOGICAL

Valid To: September 30, 2021

Certificate Number: 5166.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on fishmeal, hydrobiological products, drinking water and ice, animal feed, food, fish oil, utensils, food handlers, work surfaces, bivalves, and shellfish:

<u>Test(s)</u>	<u>Test Method(s)</u>	<u>Reference Method(s)</u>
Detection and Determination of Coliforms – MPN/CFU	INS-LAB/MET-026	GOST R 31747-2012
Detection and Determination of <i>Enterococcus</i> – CFU by Membrane Filtration	INS-LAB/MET-022	ISO 7899-2:2000
Detection of <i>Listeria monocytogenes</i>	INS-LAB/MET-016	ISO 11290-1:2017
Detection of <i>L. monocytogenes</i> (Presence / Absence)	INS-LAB/MET-013 INS-LAB/MET-014	ISO11290-1:2017; NCh 2047 of 1999; NCh 2657 of 2001; NCh 3057 of 2007
Detection of <i>Salmonella</i> spp. (Presence / Absence)	INS-LAB/MET-007 INS-LAB/MET-014	NCh 2047 of 1999; NCh 2675 of 2002; NCh 3057 of 2007
Detection of <i>Shigella</i> spp. (Presence / Absence)	INS-LAB/MET-023	ISO 21567:2004
Determination of Aerobic Mesophilic Microorganisms and Facultative Anaerobes Count – CFU Determination of Aerobic Mesophilic Microorganisms at 35C – CFU	INS-LAB/MET-004 INS-LAB/MET-014 INS-LAB/MET-025	Compendium of Methods for the Microbiological Examination of Foods, V ed. Chapter 3; GOST 10444.15-94; NCh 2047 of 1999; NCh 2659 of 2002; NCh 3057 of 2007
Determination of <i>Clostridium perfringens</i> – CFU by Membrane Filtration	INS-LAB/MET-028	Directive 98/83/CE of November 3 rd 1988
Determination of Coliforms and Fecal Coliforms (Presence / Absence)	INS-LAB/MET-012	NCh 2635-1 of 2001

<u>Test(s)</u>	<u>Test Method(s)</u>	<u>Reference Method(s)</u>
Determination of Coliforms and <i>Escherichia coli</i> (Presence / Absence) – CFU by Membrane Filtration	INS-LAB/MET-021	ISO 9308-1:2014
Determination of <i>E. coli</i> – MPN	INS-LAB/MET-011	NCh 2636 of 2001
Determination of Coliforms, Fecal Coliforms, and <i>E. coli</i> - MPN	INS-LAB/MET-018	NCh 2732 of 2002
Determination of Enterobacteriaceae without Resuscitation – MPN/CFU	INS-LAB/MET-008; INS-LAB/MET-014	NCh 2047 of 1999; NCh 2676 of 2002; NCh 3057 of 2007
Determination of Fungi <i>Aspergillus</i> Genus (Presence / Absence)	INS-LAB/MET-014; INS-LAB/MET-015	Compendium of Methods for the Microbiological Examination of Foods, V ed. Chapter 3; NCh 2047 of 1999; NCh 2735 of 2002; NCh 3057 of 2007
Determination of Fungi Yeast and Mold – CFU	INS-LAB/MET-006; INS-LAB/MET-014	Compendium of Methods for the Microbiological Examination of Foods, V ed. Chapter 3; NCh 2047 of 1999; NCh 2734 of 2002; NCh 3057 of 2007
Determination of <i>S. aureus</i> Coagulase Positive – CFU	INS-LAB/MET-010 INS-LAB/MET-014	NCh 2047 of 1999; NCh 2828 of 2003; NCh 3057 of 2007
Determination of <i>Staphylococcus aureus</i> Coagulase Positive (Presence / Absence)	INS-LAB/MET-009	NCh 2047 of 1999; NCh 2671 of 2002; NCh 3057 of 2007
Determination of Total Coliforms and <i>E. coli</i> – CFU	INS-LAB/MET-020	NCh 2043 of 1998
Sampling Drinking Water and Ice Fishmeal Fish Oil Food and Hydrobiological Products Utensils, Manipulators, Surfaces, and Ambiance	PRO-IYM-005 PRO-IYM-008 PRO-IYM-009 PRO-IYM-003 PRO-IYM-004	Manual de Inocuidad y Certificación, Parte II, Sección IV, Capítulo II SERNAPESCA NCh 43 of 61



Accredited Laboratory

A2LA has accredited

WORLD SURVEY SERVICES S.A.

Concepción, CHILE

for technical competence in the field of

Biological Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 25th of November 2019.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 5166.01
Valid to September 30, 2021

For the tests to which this accreditation applies, please refer to the laboratory's Biological Scope of Accreditation.



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CHEMICAL

Valid To: September 30, 2021

Certificate Number: 5166.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on fishmeal, fish oil, fish feed, hydrobiological products, and dried animal feed:

<u>Test</u>	<u>Test Method(s)</u>	<u>Reference Method(s)</u>
Determination of Antioxidants: BHA, BHT, TBHQ – HPLC	INS-LAQ-052	AOAC 983.15
Determination of Arsenic/Flame – AA Spectrometry Hydride Generation	INS-LAQ-043	NCh 3140 of 2008
Determination of Cadmium/Flame – AA Spectrometry	INS-LAQ-044	NCh 2638 of 2001
Determination of Chlorides – Volhard Method	INS-LAQ-029	NCh 2739-1 of 2002
Determination of Chrome/Flame – AA Spectrometry	INS-LAQ-045	NCh 2751 of 2003
Determination of Crude Protein – Kjeldahl Method	INS-LAQ-015	ISO 5983-2:2009
Determination of Ethoxyquin – HPLC	INS-LAQ-041	AOAC 996.13
Determination of Free Fatty Acids – Titrimetric Method	INS-LAQ-018	NCh 2759 of 2002
Determination of Histamine – HPLC	INS-LAQ-039	NCh 2637 of 2001
Determination of Humidity and Impurities in Dried Seaweed – Gravimetric Method	INS-LAQ-056	NCh 765 of 2018
Determination of Lead/Flame – AA Spectrometry	INS-LAQ-046	NCh 2751 of 2003
Determination of Mercury – AA Spectrometry Cold Vapor	INS-LAQ-047	NCh 2667 of 2001
Determination of Moisture – Gravimetric Method	INS-LAQ-001	NCh 2670 of 2001, Method A

<u>Test</u>	<u>Test Method(s)</u>	<u>Reference Method(s)</u>
Determination of pH	INS-LAQ-051	NCh 2738 of 2002
Determination of Total Ash and Insoluble Residue in Sand – Gravimetric Method	INS-LAQ-023	NCh 515 of 1980
Determination of Total Fat – Soxhlet Method	INS-LAQ-033	NCh 1790 of 80; NCh 514 of 1980
Determination of Total Volatile Basic Nitrogen – Steam Distillation	INS-LAQ-036	NCh 2668 of 2018
Peroxide Index – Titrimetric Method	INS-LAQ-026	NCh 2758 of 2002
Sampling Fishmeal Fish Oil Hydrobiological Products	PRO-IYM-009 PRO-IYM-003 PRO-IYM-008	Manual de Inocuidad y Certificación, Parte II, Sección IV, Capítulo II, SERNAPESCA; NCh 43 of 1961
Tocopherols – HPLC	INS-LAQ-040	AOCS Ce 8-89



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Presented this 25th of November 2019.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 5166.02
Valid to September 30, 2021

For the tests to which this accreditation applies, please refer to the laboratory's Chemical Scope of Accreditation.