

# Accreditation Certificate

## Anecto Ltd.

Mervue Business Park, Galway

### Mechanical/Environmental Testing Laboratory

Registration number: 175T

is accredited by the Irish National Accreditation Board (INAB) to undertake testing as detailed in the Schedule bearing the Registration Number detailed above, in compliance with the International Standard ISO/IEC 17025:2005 2<sup>nd</sup> Edition "General Requirements for the Competence of Testing and Calibration Laboratories" (This Certificate must be read in conjunction with the Annexed Schedule of Accreditation)

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Date of award of accreditation: 12:12:2006

Date of last renewal of accreditation: 12:12:2006

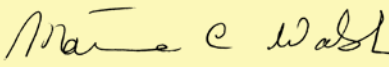
Expiry date of this certificate of accreditation: 12:12:2011

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This Accreditation shall remain in force until further notice subject to continuing compliance with INAB accreditation criteria, ISO/IEC 17025 and any further requirements specified by the Irish National Accreditation Board.

Manager: 

Mr Tom Dempsey

Chairperson: 

Dr Máire Walsh

Issued on 12 December 2006

Organisations are subject to annual surveillance and are re-assessed every five years. The renewal date on this Certificate confirms the latest date of renewal of accreditation. To confirm the validity of this Certificate, please contact the Irish National Accreditation Board.

The INAB is a signatory of the European co-operation for Accreditation (EA) Testing Multilateral Agreement (MLA) and the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement.

# Schedule of Accreditation



(Annex to Accreditation Certificate)

Permanent Laboratory:  
Category A

## ANECTO LTD

### Mechanical/Environmental Testing Laboratory

**Initial Registration Date :** 12-December-2006  
**Postal Address:** Mervue Business Park  
**(Address of other locations as they apply)** Galway  
**Telephone:** +353 (91) 757404  
**Fax:** +353 (91) 757387  
**E-mail:**  
**Contact Name:** Noel Gibbons  
**Facilities:** Public testing service

# Schedule of Accreditation



Permanent Laboratory:  
 Category A

**THE IRISH NATIONAL ACCREDITATION BOARD (INAB) is the Irish body for the accreditation of organisations including laboratories.**

Laboratory accreditation is available to testing and calibration facilities operated by manufacturing organisations, government departments, educational institutions and commercial testing/calibration services. Indeed, any organisation involved in testing, measurement or calibration in any area of technology can seek accreditation for the work it is undertaking.

Each accredited laboratory has been assessed by skilled specialist assessors and found to meet criteria which are in compliance with ISO/IEC 17025 or ISO/IEC 15189 (medical laboratories). Frequent audits, together with periodic inter-laboratory test programmes, ensure that these standards of operation are maintained.

## Testing and Calibration Categories:

- Category A:** Permanent laboratory calibration and testing where the laboratory is erected on a fixed location for a period expected to be greater than three years.
- Category B:** Site calibration and testing that is performed by staff sent out on site by a permanent laboratory that is accredited by the Irish National Accreditation Board.
- Category C:** Site calibration and testing that is performed in a site/mobile laboratory or by staff sent out by such a laboratory, the operation of which is the responsibility of a permanent laboratory accredited by the Irish National Accreditation Board.
- Category D:** Site calibration and testing that is performed on site by individuals and organisations that do not have a permanent calibration/testing laboratory. Testing may be performed using
- (a) portable test equipment
  - (b) a site laboratory
  - (c) a mobile laboratory or
  - (d) equipment from a mobile or site laboratory

## Standard Specification or Test Procedure Used:

The standard specification or test procedure that is accredited is the issue that is current on the date of the most recent visit, unless otherwise stated.

## Glossary of Terms

### Facilities:

- Public calibration/testing service:** Commercial operations which actively seek work from others.
- Conditionally available for public calibration/testing:** Established for another primary purpose but, more commonly than not, is available for outside work.
- Normally not available for public calibration/testing:** Unavailable for public calibration/testing more often than not.

Laboratory users wishing to obtain assurance that calibration or test results are reliable and carried out to the Irish National Accreditation Board criteria should insist on receiving an accredited calibration certificate or test report. Users should contact the laboratory directly to ensure that this scope of accreditation is current. INAB will, on request, verify the status and scope.



# Scope of Accreditation



Anecto Ltd

Permanent Laboratory:  
Category A

## Mechanical/Environmental Testing Laboratory

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
General Non-explosive stores and equipment including: Aerospace Structures, Materials & Equipment Computers & Peripherals Domestic Appliances Electrical/Electronic Components, Connectors & Products Electro-Mechanical Devices Large Shipping Cases 1 Loaded Containers Marine Equipment Frequency Mining Equipment Components Motor Vehicles Accessories & Components Office Equipment Packages & Packaging Material Radar Equipment Radio & Television Equipment Safety Appliances & Equipment Satellites & Sub-Assemblies Security Devices & Alarms Frequency Shipping Containers & Systems Telecommunications Equipment Traffic Signals & Signs, Static & Portable Transport Packages Unit Loads Unitised Loads	Thermal Shock  Automated Transfer Max Temperature +150°C Min Temperature - 75°C Max Chamber Size: .45m x .63m x .4m  Environmental testing - Change of temperature  Salt Spray Capacity: 1000 litre  Ingress Protection Standard Practice for Operating Salt Spray (Fog) Apparatus  IPX1 Platform Size: 60cm diameter  IPX5 Nozzle Size: 6.3mm	IEC 68-2-14:1986-04  IS EN 60068-2-14 - 2009(IEC)  IEC 68-2-11:1999 ASTM B117-03 ASTM B117-07 ASTM B117-07a  IEC 60529:2001-02

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General Non-explosive stores and equipment including: Aerospace Structures, Materials & Equipment Computers & Peripherals Domestic Appliances Electrical/Electronic Components, Connectors & Products Electro-Mechanical Devices Large Shipping Cases 1 Loaded Containers Marine Equipment Frequency Mining Equipment Components Motor Vehicles Accessories & Components Office Equipment Packages & Packaging Material Radar Equipment Radio & Television Equipment Safety Appliances & Equipment Satellites & Sub-Assemblies Security Devices & Alarms Frequency Shipping Containers & Systems Telecommunications Equipment Traffic Signals & Signs, Static & Portable Transport Packages Unit Loads Unitised Loads	<b>DYNAMIC</b>  Environmental testing. Test methods. Test Fc. Vibration (sinusoidal)  <b>Vibration</b> - Sinusoidal & Random Frequency range: 3 to 500Hz Max load: 150Kg Pk-Pk Displacement: 25mm Max Acceleration: 17g Table Size: 0.8m diameter  Frequency range: 3 to 300Hz Max load: 1000Kg Pk-Pk Displacement: 64mm Max Acceleration: 7g Table Size: 1.2m x 1.2m  Test methods. Test Fh. Vibration, broad-band random (digital control) and guidance  Standard Test Methods for Vibration Testing of Shipping Containers	IEC 68-2-6:1995-03 IS EN 60068-2-6 / IEC 60068-2-6 (ISEN)2008 / (IEC)2007  ASTM D4728-01 ASTM D4728-06 ASTM D999-01 (Method A1) IEC 68-2-64:1993-05          ISEN 60068-2-64 / IEC 60068-2-64 (ISEN)2008 / (IEC)2008  ASTM D999-08 (Method A1)

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General Non-explosive stores and equipment including: Aerospace Structures, Materials & Equipment Computers & Peripherals Domestic Appliances Electrical/Electronic Components, Connectors & Products Electro-Mechanical Devices Large Shipping Cases 1 Loaded Containers Marine Equipment Frequency Mining Equipment Components Motor Vehicles Accessories & Components Office Equipment Packages & Packaging Material Radar Equipment Radio & Television Equipment Safety Appliances & Equipment Satellites & Sub-Assemblies Security Devices & Alarms Frequency Shipping Containers & Systems Telecommunications Equipment Traffic Signals & Signs, Static & Portable Transport Packages Unit Loads Unitised Loads	DYNAMIC Shock & bump Max Severity: 20g Pulse Duration: 3 to 30mS Max Load: 150Kg Table Diameter 0.8m Max Severity: 100g Pulse Duration: 3 to 30mS Max Load: 22.7Kg Table Diameter 30cm x 30cm Max Severity: 1000g Pulse Duration: 0.6 to 60m S Max Load: 90Kg Table Diameter 0.8m	IEC 68-2-27:1987 IEC 68-2-29:1987

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General Non-explosive stores and equipment including: Aerospace Structures, Materials & Equipment Computers & Peripherals Domestic Appliances Electrical/Electronic Components, Connectors & Products Electro-Mechanical Devices Large Shipping Cases 1 Loaded Containers Marine Equipment Frequency Mining Equipment Components Motor Vehicles Accessories & Components Office Equipment Packages & Packaging Material Radar Equipment Radio & Television Equipment Safety Appliances & Equipment Satellites & Sub-Assemblies Security Devices & Alarms Frequency Shipping Containers & Systems Telecommunications Equipment Traffic Signals & Signs, Static & Portable Transport Packages Unit Loads Unitised Loads	<b>Incline Impact</b> Max Load: 200Kg Max Impact Velocity: 3.0m/s  Standard Test for Impact Testing for Shipping Containers and Systems Max Load: 200Kg Max Impact Velocity: 3.0m/s  <b>Sequential Tests</b> (Conditioning, Compression, Vibration, Shock, TS 4, TS 1) Based on above equipment	ASTM D880-92 (2002)  ASTM D880-92 (2008)  ASTM D4169-05 ASTM D4169-08  ASTM D6653-01(06) ISTA Series 1 ISTA Series 2 ISTA Series 3 ISTA Series 5 ISTA Series 7

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## Mechanical/Environmental Testing Laboratory

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
Medical Device Tests	Bubble leak	ASTM F2096-04
Packaging	Burst testing	
	Unrestrained	ASTM F1140-00(2005)
	Restrained	(Excluding Creep Testing)
Ageing	Standard Test Methods for Internal Pressurization	ASTM F1140-07
	Failure Resistance of Unrestrained Packages	
		ASTM F2054-00(2005)
	Standard Test Method for Burst Testing of Flexible Package Seals Using Internal Air Pressurization Within Restraining Plates	ASTM F2054-07
	Dye penetration	
		ASTM F1929-98(2004)
	Heat Seal Peel testing	EN868-1 (Annex F)
		ASTM F88-06
	Standard Test Method for Seal Strength of Flexible Barrier Materials	ASTM F88-09
	Accelerated and real time Ageing	
		ASTM F1980-02
	Standard guide or Accelerated Aging of Sterile Barrier Systems for Medical Devices	ASTM F1980-07

# Scope of Accreditation



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<p>Medical Device Tests</p> <p>Material Testing</p>	<p>Stainless steel needle tubing for the manufacture of medical devices</p> <p>Saline solution - temperature maintained at 23°C ± 2°C</p> <p>Sterile, single-use intravascular catheters -- Part 1: General Requirements</p>	<p>ISO 9626: 1991 (2001) Annex E</p> <p>ISO 10555-1:1997 Annex A</p>

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## Mechanical/Environmental Testing Laboratory

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
<p>Packaging for the transport of dangerous goods</p> <p>Drums:</p> <ul style="list-style-type: none"> <li>Metals</li> <li>Wood</li> <li>Fibreboard</li> <li>Plastics</li> </ul> <p>Jerricans:</p> <ul style="list-style-type: none"> <li>Metal</li> <li>Plastics</li> </ul> <p>Boxes:</p> <ul style="list-style-type: none"> <li>Metal</li> <li>Wood</li> <li>Fibreboard</li> <li>Plastics</li> </ul>	<p>Environmental tests</p> <p>Performance tests</p> <p>Drop tests</p> <p>Max Height 1.8m</p> <p>Preconditioning at -18°C (plastics)</p> <p>Stack tests</p> <p>Max Weight 1000Kg (ambient temperature &amp; 40°C as required)</p> <p>Leakproofness tests</p> <p>Max Pressure 30KPa</p>	<p>UN Chapter 6.1 Packagings (Ed 10)</p> <p>ISO 16104:2003</p>

# Scope of Accreditation



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Category A

## Mechanical/Environmental Testing Laboratory

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
<b>Packaging for the transport of dangerous goods</b> Bags: Plastics Textiles Paper  Composite packaging Plastics receptacle Glass, porcelain or stone receptacle	<b>Environmental tests</b>  Internal pressure (hydraulic) tests Max Pressure 1MPa  Conditioning at 23 oC/50% RH (Fibreboard) as required Preconditioning at -18oC (plastics)	UN Chapter 6.1 Packagings (Ed10) ISO 16104:2003

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INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
Packaged Product	Complete, filled transport packages - General rules for the compilation of performance test schedules	ISO 4180-1:1980 Part 1: General principles ISO 4180-2:1980 Part 2: Quantitative Data
Packaged Product	Standard Test Method for Determination of Leaks in Flexible Packaging by Bubble Emission	ASTM D3078-02 ASTM D3078-02(2008)
Packaged Product	Standard Test Method for Leakage Testing of Empty Rigid Containers by vacuum Method	ASTM D4991-07
Packaged Product	Standard Test Method for Thermal Insulation Performance of distribution Packages	ASTM D3130-07 ASTM 3103-07e1

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INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
Packaged Product	Standard Practice for Performance Testing of Packages for single parcel delivery systems.	ASTM D7386-08 Standard (TS4) Packs Small (TS1) Packs
Material Testing	Standard Test Method for Tensile Properties of Thin Plastic Sheeting	ASTM D882-02 ASTM D882-09