

SCOPE OF ACCREDITATION

Non Metallic Materials Testing

Element Los Angeles 1857 Business Center Drive Duarte, CA 91010

This certificate expiration is updated based on periodic audits. The current expiration date and scope of accreditation are listed at: www.eAuditNet.com - Online QML (Qualified Manufacturer Listing).

In recognition of the successful completion of the PRI evaluation process, accreditation is granted to this facility to perform the following:

AC7122/1 Rev B - Nadcap Audit Criteria for Non Metallic Materials Testing – Mechanical

Testing

- 1.1.1 Tensile Ambient Temperature
- 1.1.2 Tensile Non-ambient Temperature
- 1.1.3 Tensile Strain Measurement
- 1.1.4 Tensile/Elongation
- 1.10.1 T-Peel
- 1.11.1 Peel (180°)
- 1.12.1 Climbing Drum Peel
- 1.13.1 Floating Roller Peel
- 1.17.1 Bearing Strength
- 1.18.1 G1c
- 1.19.1 G2c
- 1.2.1 Compression Ambient Temperature
- 1.2.2 Compression Non-ambient Temperature
- 1.2.3 Compression Strain Measurement
- 1.2.4 Compression Set
- 1.2.5 Flatwise Compressive, Ambient
- 1.2.6 Flatwise Compressive Non-Ambient
- 1.2.7 Flatwise Compressive Strain Measurement
- 1.20.1 Compression after Impact CAI
- 1.21.1 Flatwise tension Sandwich
- 1.22.1 Sandwich Flexure
- 1.24.1 Tear
- 1.3.1 Shear Ambient Temperature by SBS
- 1.3.2 Shear Ambient Temperature ±45 Tension
- 1.3.3 Shear Ambient Temperature by Compression
- 1.3.4 Shear Ambient Temperature by V Notch
- 1.3.5 Shear Non-ambient (any method)

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- 1.3.6 Shear Strain Measurement
- 1.3.7 Plate Shear, Ambient
- 1.3.8 Plate Shear, Non-Ambient
- 1.3.9 Plate Shear, Strain Measurement
- 1.4.1 Flexural Ambient Temp
- 1.4.2 Flexural Non-ambient
- 1.4.3 Flexural Strain measurement
- 1.7.1 Impact Strength
- 1.8.1 Double Lap Shear Ambient Temperature
- 1.8.2 Double Lap Shear Non-ambient Temperature
- 1.9.1 Single Lap Shear Ambient Temperature
- 1.9.2 Single Lap Shear Non-ambient Temperature

AC7122/2 Rev A - Nadcap Audit Criteria for Non Metallic Materials Testing – Physical Testing

- 2.1.2 Hardness Testing: Barcol
- 2.1.3 Hardness Testing: Shore
- 2.12.1 Effects of Liquids
- 2.16.1 Retraction Low Temperature TR10
- 2.17.1 Deterioration in Air Oven
- 2.2.1 Density/ Specific Gravity
- 2.3.1 Resin/Fiber /Void Content by: Acid Digestion
- 2.3.2 Resin/Fiber /Void Content by: Burn off
- 2.3.3 Resin/Fiber /Void Content by: Solvent wash
- 2.4.1 Water Absorption
- 2.5.1 Volatile Content
- 2.6.1 Gel Time
- 2.7.1 Flow
- 2.8.1 Fiber Areal Weight
- 2.8.2 Prepreg Areal/Adhesive Film Weight
- 2.8.3 Mass per Unit Length
- 2.9.1 Viscosity Liquid Resin
- 2.9.2 Viscosity Liquid Resin Cup Method

AC7122/3 Rev A - Nadcap Audit Criteria for Non Metallic Materials Testing – Chemical Testing

- 3.1.1 IR/FTIR
- 3.2.1 HPLC

AC7122/4 Rev A - Nadcap Audit Criteria for Non Metallic Materials Testing - Thermal Analysis

- 4.1.1 Dynamic Mechanical Analysis (DMA)
- 4.2.1 Thermogravimetric Analysis (TGA)
- 4.3.1 Differential Scanning Calorimetry (DSC)

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- 4.4.1 TMA: Glass Transition TemperatureTMA
- 4.5.1 DSC: Specific Heat CapacitySpecific
- 4.6.2 TMA: Linear Thermal Expansion of SolidsCTE
- 4.7.1 Total Mass Loss/Collected Volatile Condensable Materials (TML/CVCM)
- 4.8.1 Total Mass Loss/Collected Volatile Condensable Materials (TML/CVCM)

AC7122/5 - Nadcap Audit Criteria for Non Metallic Materials Testing – Flammability

- 5.1.1 Vertical
- 5.2.1 Horizontal
- 5.2.2 Angled (45°)

AC7122-I Rev E - Nadcap Audit Criteria for Non Metallic Materials Testing (Required) (to be used on audits on/after 24 March 2019)

Class A: Composites

Class B: Adhesive/Adhesive Primer

Class C: Elastomers

Class D: Core Class E: Fiber

Fabrication - Codes

F.2.1 Specimen Fabrication

F.3.1 Specimen Machining

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This certificate is granted and awarded by the authority of the Nadcap Management Council to:

Element Los Angeles

1857 Business Center Drive Duarte, CA 91010 United States

This certificate demonstrates conformance and recognition of accreditation for specific services, as listed in www.eAuditNet.com on the Qualified Manufacturers List (QML), to the revision in effect at the time of the audit for:

Non Metallic Materials Testing

Certificate Number: 5488192107 Expiration Date: 31 July 2022 Accreditation Length: 24 Months

Michael J. Hayward

Executive Vice President & Chief Operating Officer