



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

SCI-LAB MATERIALS TESTING INC.  
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MECHANICAL

Valid To: March 31, 2013

Certificate Number: 2743.01

In recognition of the successful completion of the A2LA evaluation process; accreditation is granted to this laboratory to perform the following types of tests on Adhesives (Organic Resins); Glues; Paints; Varnishes; Inks; Coatings; Allied Products; Plastics; Resins; Rubbers; and Articles of Metal:

**TEST/ TEST PARAMETERS**

**TEST METHOD(S)**

**Environmental/Aging**

Altitude: (0 to 50,000) ft

MIL-STD-810, Method 500, Procedures I, II, III

Environmental: Temperature Test and  
Temperature and Humidity

Temperature Range: (-70 to 180) °C

Humidity Range: (10 to 98) %RH (± 2.5 %RH)

32067-SDS; 32163-SDS; 7710Z-S3VA-A010-M1;  
ASTM D1693; ASTM D3012; ASTM D3045;  
ASTM D573; DVM-19195; DVM-19298;  
DVM-19297; DVM-32163; FLTM BQ 104-07; GM9125P;  
GM9128P; GM9505P; GM9059P; GM9202P; GM9302P;  
GM9504P; GMW14124; GMW14729; GMW3232;  
GMW3259; IEC 68-2-1; IEC 68-2-2; IEC 68-2-3;  
IEC 68-2-13; IEC 68-2-14; IEC 68-2-28; IEC 68-2-30;  
IEC 68-2-38; IEC 68-2-56; IP-0023; ISO 188; ISO 2440;  
JIS K 6261; LP 461H-15; LP 463CB-10-01; LP 463LB-12-01;  
LP 463LB-13-01; LP 463PB-09-01; LP 463PB-22-01;  
LP-463AB-53-01; MIL STD 810, Methods 501, 502, and 507;  
MIL-STD 202F, Method 103B; MIL-STD 883E, Methods  
1008.2 and 1010.7; MS-210-05; NES M0131; NES M0132;  
SAE-J1717; SAE-J2100

Thermal Shock

Temperature Range: (-50 to 175) °C

DVM-0004-RG; DVM-0019-OR; DVM-004-RG; FLTM BI  
107-05; GM9525P; GMW15919;  
MIL-STD 202G, Method 107G; MIL-STD 810, Method 503;  
MIL-STD 883E, Method 1011.9

**Accelerated Corrosion**

Salt Spray/Salt Fog

Temperature Range: (23 to 60) °C

ASTM B117; DVM-0002-BM; DVM-0014-EX;  
FLTM BI 103-01; GM4298P; HES D 2021-07; IEC 68-2-11;  
IEC 68-2-52; ISO 9227; JIS Z2371;  
MIL-STD-810, Method 509; NES M0140; TSH 1552G;  
CETP 00.00-L-467

## TEST/ TEST PARAMETERS

Cyclic Corrosion

CASS Exposure

Temperature Range: (23 to 60) °C

Fog-Type Humidity

Temperature: (23 to 50) °C

Humidity: 100% RH

HALT Chamber

Acceleration: 0.75 grms

Temperature Range: (-100 to 200) °C

## Vibration & Shock

### Capabilities

Vibration with Combined Environments

Temperature Range: (-73 to 177) °C

Frequency Range: (5 to 3,000) Hz

Random: 2,700 force lbs

Sine: 3,000 force lbs

Max. Acceleration: 101 g Sine

### Pneumatic Shock Table

Duration: (0.25 to 30) msec

Acceleration: (5 to 2000) g

### Electrodynamic Shock Tester

Duration: (0 to 30) msec

Acceleration: (1 to 100) g

Buzz; Squeak & Rattle Vibration

Aural & Sound Level Meter (up to 130 dB)

## Durability

### Capabilities

Robotic Cycling

Load Application Range: (0 to 120) kgf

Speed Range: (0 to 2,000) mm/sec

Temperature Range: (-50 to 180) °C

## TEST METHOD(S)

FLTM BI 104-02; DVM 0066-CF; DVM-0008;  
FLTM BI 123-01; FLTM BI 123-03;  
FLTM BQ 105-01; GM9102P; GM9511P; GM9540P;  
GMW14872; ISC-E00-005.5.1; MIL-STD 202F, Method  
101D; SAEJ2334

ASTM B368; GM4476P; GMW14458; NES M0138-91

ASTM D1735; ASTM D2247; FLTM BQ 007-02; GM4465P;  
JIS D 0203; IEC 68-2-18

Qualmark Guideline 9.0

65840NDS00; 7412Z-S9V-A010-M1; ANSI C136.31-2001;  
ASTM D4728-06; Bellcore GR-63-CORE;  
ES-6L2T-14540-AB; 5.55; ICS 000005173; IEC 61373;  
IEC 68-2-34; IEC 68-2-6; IEC 68-2-64; JIS D1601;  
MIL-STD 202G, Method 201A; MIL-STD 810, Method 514;  
MIL-STD 883E, Method 2001.2;  
MIL-STD 883E, Method 2007.3; PF-10563; TSE2512G;  
TSM6709G; Z10270 G00; Z10296-E00; Z10365-C00

ES-6L2T-14540-AB; 5.31; IEC 61373; IEC-68-27;  
IEC-68-29; MIL-STD 810, Method 516;  
MIL-STD 883E, Method 2002.3

DVM 0002-IP; PF-8243

DVM 0001-IP; DVM 0019-IP; DVM 0041-IP;  
DVM 0004-IP; DVM 0005-ST; ES-84510; GM7452M;  
GM9758P; GMN10083; GMW3172; HES D3127;  
IP-0022; IP-0115;  
MCS E.S.000003970-02; MES PA 55000B;  
MES PA 60350C; MES PA 64030B; MES PA 64390A;  
MES PA 64410C; MES PA 64610C; MES PW PT001C;  
PF-10799; PF-10817; PF-10915; PF-11014; PF-8684-A;  
DVM-0051-STv6; TSF7206G; TSF7303G



**TEST/ TEST PARAMETERS**

Environmental Chamber  
Temperature Range: (-70 to 180) °C  
Humidity Range: (10 to 98) %RH (± 2.5 %RH)

Pneumatic Cycling

**Weatherability & Solar Climatic**

Capabilities

Environmental Chambers  
Temperature Range: (-70 to 180) °C  
Temperature Ramp Rate: Up to 10°C/min  
Humidity Range: (10 to 98) %RH (± 2.5 %RH)

Sunload/IR Exposure  
IR Surface Temperature Range: (50 to 150) °C

Solar Climatic

Xenon Arc Weather-o-meter  
Black Panel Temperature: Ambient to 100°C;  
dry bulb temperatures to ±2°C  
Humidity: (10 to 80) % RH

QUV

Sunshine Weather-o-meter  
Carbon Arc Weather-o-meter

**Dust & Water Resistance**

Capabilities

Environmental Chambers  
Temperature Range: (-70 to 175) °C  
Temperature Ramp Rate: Up to 10°C/min  
Humidity Range: (10 to 98) %RH (± 2.5 %RH)

Waterproofness/Rain Exposure

Submergence

Sand & Dust

**TEST METHOD(S)**

TSF7304G; TSF7350G; TSF7356G; TSF7357G; TSF7358G;  
TSF7359G; TSF7363G;

ASTM D3574, Test I3

31826-SDS; ASTM D2565; DVM-31826; ES-X33035;  
ES-X60210; ES-X83239; FLTM BN 101-01;  
FLTM BO 101-03; FLTM EU BN 001-01;  
FLTM EU BO 050-01; GM9310P; GMW14162;  
HES D 6601; JIS B 7754; JIS D 0205;  
LP 463KB-12-01; LP 463KB-7-01; LP 463PB-16-01;  
LP 463PB-17-01; LP 463TB-2-01; NES-M0135;  
SAE-J1885 (withdrawn<sup>1</sup>); SAE-J1960 (withdrawn<sup>1</sup>);  
SAE-J2412; SAE-J2527; TSH 1528G; TSH 1582G;  
TSH1520G; TSH1582G; TSH1585G

RTCA/DO-160, Cat. R/S/W/Y; ASTM C272;  
ASTM D2842; ASTM D4585; ASTM D570;  
ASTM D870; BS EN 60529, Sect. 14.2.1, IPX1;  
BS EN 60529, Sect. 14.2.2, IPX2; DVM-0026-PA; GM9531P;  
ISO 2896; MIL-STD 202F, Method 106F;  
MIL-STD 810F, Method 506.4;  
MIL-STD 883E, Method 1004.7; SAE J1913; TSH1505G

MIL-STD 810F, Method 512.4; IEC-68-2-18

IEC 60529; IEC 68-2-68; JIS D 0207;  
MIL-STD 810, Method 510; SAE J726

**TEST/ TEST PARAMETERS**

**TEST METHOD(S)**

**VOC/SVOC (Volatile & Semi Volatile Organic Compounds) Emissions & Organic Analysis**

Capabilities

Environmental Chambers  
Temperature Range: (-70 to 175) °C  
Humidity Range: (10 to 98) %RH (± 2.5 %RH)

0094Z-SNA-0000; ASTM D2369; GMW15634;  
GMW8081; ISO 4406; NES M0301; TSM0508G;  
TSM0509G; TSZ0003G; WSB-M2D402-A3

**Failure Analysis**

Fourier Transform Infra-Red (FT-IR) Spectroscopy     ASTM D5477  
  
Differential Scanning Calorimetry (DSC)             ASTM D3418  
  
Thermo Gravimetric Analysis (TGA)                 ASTM D3850

**Plastics & Rubber**

Capabilities

Universal (Tension/Compression) Test Machine  
(Instron)  
Heat Deflection Apparatus  
Melt Flow Indexer  
Durometer/Asker Hardness  
Fourier Transform Infra-Red (FT-IR) Spectroscopy  
Differential Scanning Calorimetry (DSC)  
Thermo Gravimetric Analysis (TGA)  
Surface Roughness  
Moisture Analysis (Karl Fisher Titration)

0094Z-S3V-A200; 62890NDS00;  
7710ZSTX\_A211M1\_C4625320\_E;  
7710Z-STXA-A210-M1;  
7729Z-S5A-0000; 8410Z-SE3-0001;  
8412Z-S5A-A010-M1; ASTM D1050 ;  
ASTM D1238; ASTM D1599; ASTM D3418 ;  
ASTM D3677; ASTM D380; ASTM E1131;  
ASTM E168; DVM-0013-OR; GM2212; TSL 57056;  
GM7400M; HES C 252; HES D2500-99A;  
HES D2502-02; ISO 1133; ISO 11358-1 & -2;  
ISO 7214; JIS K 6767; JIS K6301; JIS K6723 ;  
JIS Z 1702; JIS Z 1709; LP-463TB-9-01;  
MES MN 401D; MES PA 55219A; MS-DC634 ;  
MS-DC-648; MS-DC-649; MTL 4333; NES M7108;  
NES M8020; SAE J1717; SAE J860 ; TI 134 ;  
TS 371-0-4; TSF1354G; TSF2251G; TSF2254G; TSF2256G;  
TSF3253G; TSF3256G; TSF3550G; TSF7204G; TSF7351G;  
TSF7354G; TSF7754 G; TSF7755G; TSL3505G ; TSL5100G;  
TSM0502G; TSM0501G; TSM0502G; TSM0506G;  
TSM5512G; TSM5514G; TSM5515G

**Metallic Ores and Products (All Forms, Articles of Metal)**

Capabilities

Universal (Tension/Compression) Test Machine  
(Instron)  
Microscopic  
Magnifications: 25x; 100x; 200x; 500x; 1000x  
Hardness Rockwell; Knoop; Vickers  
Analytical Balance (Coating Weight)  
Surface Roughness  
Strain Gages

ASTM A247; ASTM A370; ASTM A892;  
ASTM E1077, Procedures 7.1, 7.2, 7.3, and 7.4;  
ASTM E112; ASTM E45; ASTM E930; GM8101G;  
GMW3335; JIS G 0303; JIS G 4404; JIS Z 8901;  
MES MM 100A; SAE J1268

## TEST/ TEST PARAMETERS

## TEST METHOD(S)

### Coatings & Plating Systems

#### Capabilities

Microscopic: 25x; 100x; 200x; 500x; 1000x  
Stereomicroscopic: Magnification, Up to 120x  
Colorimeter  
Five-Finger Scratch  
Coulometric Thickness  
Kocour  
Water Jet  
Gravel-o-meter  
Analytical Balance

#### High Pressure Cleaning:

Temperature Range: (0 to 95) °C  
Pressure: (0 to 1000) psi

#### Environmental Chambers:

Temperature Range: (-70 to 180) °C  
Temperature Ramp Rate: Up to 10°C/min  
Humidity Range: (10 to 98) %RH (± 2.5 %RH)

ASTM A90; ASTM B137-95; ASTM B456;  
ASTM B487; ASTM B499; ASTM B504;  
ASTM B571; ASTM B659; ASTM B680;  
ASTM B764;  
ASTM D1186 (withdrawn<sup>1</sup>);  
ASTM D1400 (withdrawn<sup>1</sup>);  
ASTM D3170; ASTM D4414; ASTM D714;  
DVM-0026-PA; DVM-0039-PA;  
DVM-0040-PA; DVM-0058-PA;  
DVM-5861; DWG 0096Z-SM4-0000;  
DWG 096Z-S5N-C000; FLTM BI 007-01;  
FLTM BI 104-01; FLTM BI 117-01;  
FLTM BI 157-05; FLTM BI 157-06;  
FLTM BO 155-01; FLTM EU BI 057-02;  
GM4260P; GM4372M; GM4373M; GM9033P;  
GM9508P (inactive<sup>1</sup>); GMW14668; GMW14700;  
GMW14797; HES D 2021-07; HES D 6501-06;  
HES D2003-04; HES D2018-99; HES D6001-4.2;  
HES D6001-04A; HES D6500; ISC-E00-006;  
ISO 1463; ISO 2808; ISO 3613; ISO 3613;  
JIS K 5400 (withdrawn<sup>1</sup>);  
LP 463PB-39-01; MES MN 600H;  
MES MN 601G; MS-PD-48-1; NES M 0007;  
NES M0141; NES M5081; PA-0145; SAE J400;  
TSH 1551G; TSH 3111G; TSH 6500G; TSH1501G;  
TSH1503G; TSH7702G

### Tension; Compression & Tear Properties

#### Capabilities

Universal (Tension/Compression) Test Machine  
(Instron)  
Pneumatic Compression  
Extensometer

ASTM D1004; ASTM D1117 (withdrawn<sup>1</sup>);  
ASTM D1229; ASTM D1708; ASTM D1822;  
ASTM D2261; ASTM D2990;  
ASTM D395, Method B; ASTM D412; ASTM D5034;  
ASTM D5733; ASTM D575; ASTM D624;  
ASTM D638; ASTM D882; ASTM E8; ASTM F152;  
DVM -18401; FLTM BN 022-01;  
FLTM BN-015-01; FLTM BN-015-02;  
GM6086M, Sect 3.2; IP-0021; ISO 1798; ISO 1856;  
ISO 1926; ISO 37; ISO 527-1/2; ISO 8067; ISO 844;  
JIS K 6301 (withdrawn<sup>1</sup>); JIS K 7128-1; JIS K6251;  
JIS K6252; JIS Z 2201; JIS Z 2241;  
LP 463TB-4-01; LP-463DB-5-03; LP-463KB-5-01;  
MES MM 106A; MIL-STD 883G, Method 2019.7;  
SAE J1352; SPP-GTP-2005; TP-10110

**TEST/ TEST PARAMETERS**

**TEST METHOD(S)**

**Impact Resistance**

Capabilities

Environmental Chamber  
Temperature Range: (-70 to 180) °C  
Humidity Range: (10 to 98) %RH (± 2.5 %RH)  
Multi-Axial Impact  
Gardner/DuPont Impact

77211-SJC-A000-20; 8352Z-STXA-A000;  
8352ZSZA\_A000; 8352Z-TA0A-V000;  
8373Z-TA0A-V000; 8412Z-SEP-A020-M2;  
ASTM D1709; ASTM D2794; ASTM D3763;  
ASTM D5420; DVM-14144v4;  
FLTM BO 151-01; FLTM BO 151-02; GM9011P;  
FMVSS 201; GM9032P; GM9140P; GM9300P;  
GM9528P; GM9773P; GM9904P; GMW14093;  
Honda 3575Z-SNA-0000, Sec 3.18; IEC 68-2-62;  
ISO 6603-1; ISO-6603-2; LP 463DB-14-01;  
LP 463PB-19-01; LP-463LB-11-01;  
LP-463LB-11-01B; NES M0134; PF-11014, Sec 3.3;  
PF-4992; SAE J323; ST-0005

**Friction; Wear & Roughness**

Capabilities

Crockmeter  
SLIDO  
Robotic  
Temperature Range: (-60 to 170) °C  
Surface Roughness

AATCC, Test Method 8; DVM-0011-BPv3;  
DVM-0056-PA; FLTM BA 003-01;  
FLTM BN 107-01; FLTM BN 108-10;  
GM9600P; JIS L0823 (withdrawn<sup>1</sup>);  
JIS L0849; LP 463AB-52-01; LP 463KB-21-01;  
LP-463PB-54-01; SAE J861; TSL2100G

**Bend; Flexibility & Deflection**

Capabilities

Universal (Tension/Compression) Test Machine  
(Instron)  
  
Environmental Chamber  
Temperature Range: (-70 to 180) °C  
Humidity Range: (10 to 98) % RH (±2.5% RH)  
  
Robotic  
Speed: 0.1 to 2000 mm/min  
Force Measurement: (0 to 120) kgf  
Test Temperature: (-60 to 175) °C

ASTM D1056; ASTM D1790; ASTM D3574;  
ASTM D3575; ASTM D746; ASTM D790;  
ASTM D926; ASTM D623;  
CPNM-MOS-ST-10-04-07-E;  
FLTM BI 009-05; FLTM BN 102-01;  
FLTM EU BO 051-09; GM9503P; ISO 1209;  
ISO 178; ISO 812; ISO 974; JIS K7203 (withdrawn<sup>1</sup>);  
LP 463AB-5-08; LP 463AB-25-01; LP 463AB-5-04;  
MS-DC634; TSH1504G;

**Flammability**

Capabilities

Horizontal & Vertical

Per FMVSS 302 (incl. parameter variations for other specifications listed in Scope below)  
ASTM D635; ES-X60410; FLTM BN 024-02;  
FLTM EU BN 024-02; FMVSS 302/CMVSS302;  
GM9070P; GMW3232; HES C206; HES D6003;  
ISO 3795; LP 463KC-13-01; MES CF 050;  
MES CF050D; MS-300-8; NES M0094;

**TEST/ TEST PARAMETERS**

**Flammability**

Horizontal & Vertical (Cont'd)

**Odor & Fogging**

Fogging:

Odor:

**Fabrics & Fibers**

Capabilities

Universal (Tension/Compression) Test Machine (Instron)  
Microscopic  
Fourier Transform Infra-Red (FT-IR) Spectroscopy  
Universal (Tension/Compression) Test Machine (Instron)  
Xenon Arc Weather-o-meter  
Sunshine Weather-o-meter  
Carbon Arc Weather-o-meter

**Hardness**

Capabilities

Pencil Hardness (softer to harder): 6B to 6H  
  
Rockwell Hardness  
Durometer/Asker Hardness Types: A; D; Asker C  
  
Thumbnail Hardness  
  
Vickers/Knoop Hardness  
Test Force: 10g; 25g; 50g; 100g; 200g; 300g; 500g; 1000g  
Load Duration: (5 to 99) sec (using 1-second increments)  
Microscope Magnification: 100x; 200x; 500x

**Colour; Gloss; Haze & Appearance**

Capabilities

AATCC (Grey & Colour Scales)  
Color  
Haze

**TEST METHOD(S)**

RTCA/DO-160, Sect. 26, Categories A & B;  
RTCA/DO-160; Sect. 9; SAE J369;  
TSM0500G; TSM0504G; UL 94

DIN 75 201; GM9305P; GMW3235;  
HES D 6508; NES M0161; SAE J1756; TSM0503G;  
FLTM EU BO 016-02; LP 463 DB-12-01

GMW3205; MS-300-34; NES M0160;  
SAE J1351; TSM0505G; FLTM BO 131-01;  
LP 463KC-09-01; FLTM BO 131-03

8102Z-SEP-A000; 8330Z-SV4-J010-M1;  
ASTM D5736; ASTM E168; ESB-M17H158-A;  
FLTM AN 101-03; GM9635P; GM9771P;  
HES D6506-00; MES MN 405; NES M7101;  
SAE J1530; TSF7360G; TSL3505G; TSL2100G;  
TSL2613G; TSL3101G; TSL3503G; TSL3607G;  
TSL3608G (*except Section 4.11*); TSM6700G

ASTM D3363; LP 463PB-2-01

ASTM D2240; ASTM E140; ASTM D785; ASTM E18;  
ASTM D1415; ASTM D1474; ASTM E384; GM9053P;  
GM9054P ; ISO 2439; ISO 868;  
JIS K 6253; SAE J1237; SAE J417; TSH1500G; TSH1539G

GM9507P

ASTM E140; ASTM E92

ASTM D1729; ASTM D2244; FLTM BI 109-01;  
JIS L0804; SAE J1545; JIS L0801; LP-463KC-1-01



## TEST/ TEST PARAMETERS

Lightbooth

Specular Gloss

**Appearance:**

## Adhesion/Cohesion & Peel Strength

### Capabilities

Universal (Tension/Compression) Test Machine  
(Instron)

Speed: (0 to 500) mm/min (1,000 mm/min up to 500 kgf)

Force Measurement: (0 to 5,000) kgf

Temperature Range: (-50 to 175) °C

Force Gauge: (0 to 54) kgf / (0 to 120) lbf

## TEST METHOD(S)

ASTM D1003; ASTM D4039; TSM1564G; TSH1520G;  
TSL0601G

ASTM D2457; ASTM D523; FLTM BI 110-01; TSH1519G

DVM-0006-PA; DY-0001;  
MIL-STD 883G, Method 2009.9

0095Z-S04-0000; 0095Z-SDA-A000;  
ASTM D3359; ASTM D413; ASTM D429;  
ASTM D903; ASTM D952; DVM-0023-PA;  
FLTM BI 106-01; FLTM BU 112-02;  
FLTM BU-109-02; GM3602M; GM3604M;  
GM3608M; GM3622M; GM6271M;  
GM9071P; GM9502P; GM9506P;  
GM9774P; GM9797P; GM9837P (inactive<sup>1</sup>);  
GM9838P; GM9896P; GMW14829;  
JIS K 6829 (withdrawn<sup>1</sup>);  
LP 463LB-10-01; LP 463TB-11-01;  
LP 463TB-3-01; LP 463TB-8-01;  
MIL-STD 883G, Method 2011.7;  
MS-CB 124; NES M0152;  
SAE J1553; SAE J1679; SAE J2215;  
TS 371-0-4 (10); TSK5702G

## Chemical/Staining Resistance & Cleanability

### Capabilities

Environmental Chamber:

Temperature Range: (-70 to 180) °C

Humidity Range: (10 to 98) % RH (± 2.5 %RH)

Colorimeter

Gloss Meter

Weather-o-meter

AATCC (Grey & Colour Scales)

Ovens

Lightbooth

ASTM D1308; ASTM D471; ASTM D543;  
ASTM D925, Methods A & B; ASTM F146;  
DVM 0037-PA; DVM-0012-OR; DVM-0017-MA;  
DVM-0027-MA; DVM-0037-PA; DVM-0041-PA;  
DVM-27881; FLTM AN 101-01; FLTM BI 113-01;  
FLTM BI 113-02; FLTM BI 113-03;  
FLTM BN 012-06; FLTM BN 112-08;  
FLTM BO 101-05; FLTM BO 160-04; FLTM BP 153-01;  
GM7452M; GM9069P; GM9126P; GM9133P; GM9141P;  
GM9147P; GM9156P; GM9172P; GM9500P; GM9501P;  
GM9509P; GM9689P; GM9736P; GM9900P; GMN10033;  
GMW14069; GMW14333; GMW14334; GMW14445;  
GMW14864; GMW3402; GMW3402; ISO 3865 (except C);  
JIS K 2202; JIS K 2203; LP 463CB-14-01; LP 463KC-04-01;  
LP 463PB-06-01; LP 463PB-31-01; LP 463PB-7-01; LP-  
463KC-03-01-B; LP-463KC-04-01-H;  
LP-463KC-1-01; MDT-060; NES M0133; NES M7083;  
TM-GEN-022B; TSH1508G; TSH1509G; TSH1562G;  
WSS-M15P20-B1/B2

**TEST/ TEST PARAMETERS**

**TEST METHOD(S)**

**Filler/Ash and Volatile Content**

Capabilities

Muffle Furnace:  
Temperature Range: (100 to 850) °C  
  
Thermo Gravimetric Analysis (TGA)  
Temperature Range: (23 to 1000) °C (±1 °C Isothermal)  
  
Analytical Balance

ASTM D1203; ASTM D2288 (withdrawn<sup>1</sup>);  
ASTM D2584; ASTM D5630; ASTM D6980;  
FLTM BO 006-01; FLTM BO 006-02;  
FLTM BO 006-03; FLTM BO 012-01;  
FLTM BO 106-01; FLTM BO 106-04;  
FLTM EU BO 006-02; GM9077P;  
GM9306P; ISO 1172; ISO 3451-1; ISO 3451-4;  
LP 463DB-13-01; LP 463DD-4-01

**Scratch & Mar**

Capabilities

Taber; Five-Finger & Robotic Scratch: Std. Load  
Application Range: (0.6 to 20) N  
Speed: Approx. 100 mm/sec.

8350Z-SDA-9000; DVM-0034 PA; DVM -0035 PA;  
DVM-0034-PA; DVM-0035-PA; FLTM BI 161-01;  
FLTM BN 108-03; FLTM BN 108-04;  
FLTM BN 108-13; FLTM BN 108-13;  
FLTM-108-13; GM9150P; GMN3943; GMW14130;  
GMW14688; JIS K 5600-5-5; LP-463DD-18-01;  
LP-463PB-43-01; NES M 0159; SAE J365;  
TSH1544G

**Abrasion**

Capabilities

Taber, Gakushin, and Robotic  
Loads: 250 g- to 120 kg-force  
Cycle Rates: (0.01 to 120) cpm  
Speed: (0 to 2,000) mm/min  
Temperature Range: (-60 to 170) °C

ASTM D1044; ASTM D1630; ASTM D4060;  
ASTM D3884; ASTM D4482; FLTM BN 108-02;  
GM9515P; NES M0136; SAE J948; SAE J965

**Density/Specific Gravity**

Capabilities

Analytical Balance  
Vernier Calipers

ASTM B328 (withdrawn<sup>1</sup>); ASTM D3776, Option C;  
ASTM D792; GMW3182; ISO 1183; ISO 845;  
JIS K 7112; LP-463FB-02-01

**Dimensional Stability**

Capabilities

FARO Arm

(0.000 to 2,400) mm  
(± 0.043 mm)

Vernier Calipers

(0.00 to 1,500) mm  
(0.01 mm resolution)

Feeler Gauge

(0.00 to 1.00) mm  
(0.05 mm increments)

**TEST/ TEST PARAMETERS**

**TEST METHOD(S)**

**Dimensional Stability (Cont'd)**

Environmental Chamber

Temperature Range: (-70 to 180) °C  
Temperature Ramp Rate: Up to 10°C/min  
Humidity Range: (10 to 98) %RH (± 2.5 %RH)  
Std. Chamber Capacity: Up to 32 cu. ft. + extension  
Walk-In Capacity: Up to 760 cu. ft.

DVM-6394;  
GMW4217;  
ISO 2796;  
JIS K 6262;  
SAE J883;

**Also using customer specific test methods utilizing any combination of test equipment parameters listed above.**

The laboratory is accredited for the test methods listed above. The accredited test methods listed above are used in determining compliance with the material specifications listed below; however; the inclusion of these material specifications on this Scope does not confer laboratory accreditation to the material specification. Inclusion of these material specifications on this Scope also does not confer accreditation for every method embedded within the specification. Only the methods listed above on this Scope are accredited.

**Chrysler:** ICS Z10432 HB; ICS Z10463 ND; Z10463

**FORD:** ICS Z10296-E00 U222/228 and 354; VE-3W1H-19893-AA; WSS-M2P180-A; WSS-M2P181-A; WSS-M2P188-A1

**GM:** GM3803M; GM4497M; GM6090M; GM6010M; ICS 00007601 07 (GMX001); ICS Z10450 (GMT920/930); Z10419; Z10450

**Honda:** 0094Z-SFA-9000; 7244Z-STKA-A000; 7315ZS5A\_0000\_R4Y21094\_E ; 7710Z-SCC-9000; 7710Z-SCC-9001; 7410Z-SDA-A000; 7481ZSZAAA000\_SZAAF2387\_E; 7710Z-SCC-9001; 7710Z-SEP-A010-M1; 7710Z-SEP-A210-M1; 7710Z-SEP-A810-M1; 7710Z-SZAA-V000 DOC070529; 7710ZTK4\_A110M1; 7710ZTK4\_A210M1; 7710ZTK4\_A910M1; 7710Z-WZXA-R800; 7711Z-SOK-A011-M1; 7785Z-STX-A810-M1\_C4624034\_E; 7785Z-STXA-A810-M1; 7850ZSNA\_N901\_R4523058\_E\_ ; 8330Z-STX-A010-M1; 8341Z-S84-A000; 8350Z-SNA-0000; 8350Z-SNA-N000; 8410Z-SJD-9000; 8420Z-SLJ-0000; 8460Z-SEA-0000; 8461Z-SZAA-V000

**Nissan:** 27800NDS00; 27860NDS00; 76840NDS00; 76850NDS00; 80900NDS00; 8102Z-SDAX-A500; 8350Z-SDA-9000

**Toyota:** TSZ0001G; TSM5518G; TSM5523G; TSM5601G; TSM5608G; TSM5725G; TSM7500G; TSH3130G; TSH3131G

**Material Specifications from Coating & Plating Systems:** 0094Z-SJC-A210-MI; 0096Z-SEC-A000; 0096ZSIE-E000; 7214ZST7 0000 R4P21051E; 7315ZS5A 0000 R4Y21094E

<sup>1</sup> NOTE: This laboratory’s scope contains withdrawn or inactive methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered “historical” and not that the laboratory’s accreditation for the method has been withdrawn.



The American Association for Laboratory Accreditation

World Class Accreditation

# Accredited Laboratory

A2LA has accredited

## SCI-LAB MATERIALS TESTING, INC.

*Kitchener, Ontario, CANADA*

for technical competence in the field of

### Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *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 8 January 2009*).

Presented this 27th day of April 2011.



  
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Peter Abney

President & CEO  
For the Accreditation Council  
Certificate Number 2743.01  
Valid to March 31, 2013  
Revised May 26, 2011

*For the tests or types of tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.*