

TESTING AND CALIBRATION LABORATORY ACCREDITATION PROGRAM (LAP)

Scope of Accreditation

Accredited Laboratory No. 447

Legal Name of Accredited Laboratory: **CAMBRIDGE MATERIALS TESTING LIMITED Mississauga Division**

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SCC File Number:	15545
Accreditation Standard(s):	ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories
Fields of Testing:	Chemical/Physical Mechanical/Physical
Initial Accreditation:	2002-05-13
Most Recent Accreditation:	2021-10-31
Accreditation Valid to:	2022-05-13

Remarque: La présente portée d'accréditation existe également en français, sous la forme d'un document distinct.

Note: This scope of accreditation is also available in French as a separately issued document.

CHEMICALS AND CHEMICAL PRODUCTS

Chemical Compounds (not specified elsewhere):

Liquid

ASTM D4327	Test Method for Anions in Water by Chemically Suppressed Ion Chromatography, including extraction methods QTP 25M, QOP 70M
ASTM E70	Test Method for pH of Aqueous Solutions with the Glass Electrode
EPA Method 7196A	Chromium, Hexavalent (Colorimetric)

ELASTOMERS AND PROTECTIVE AND COATINGS

Paints, Varnishes, Inks, Coatings, and Allied Products:

Miscellaneous Products

ASTM F519	Standard Test Method of Mechanical Hydrogen Embrittlement Evaluation of Plating / Coating Processes and Services Environments (Only Type 1a.1 and 1a.2 specimens)
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Plastics, Resins and Rubbers:

Plastics

ASTM D1622	Test Method for Apparent Density of Rigid Cellular Plastics
ASTM D2584	Test Method for Ignition Loss of Cured Reinforced Resins
ASTM D3418	Test Method for Transition Temperatures of Polymers by Differential Scanning Calorimetry
ASTM D4495	Test Method for Impact Resistance of Poly (Vinyl Chloride) (PVC) Rigid Profiles by Means of a Falling Weight
ASTM D570	Test Method for Water Absorption of Plastics
ASTM D790	Test Methods for Flexural Properties of Un-reinforced and Reinforced Plastics and Electrical Insulating Materials
ASTM D792	Test Method for Density and Specific Gravity (Relative Density) of Plastics by Displacement
ASTM D882	Test Method for Tensile Properties of Thin Plastic Sheeting
ASTM E1131	Test Method for Compositional Analysis by Thermogravimetry

ASTM E1252	Practice for General Techniques for Obtaining Infrared Spectra for Qualitative Analysis
ASTM E1269	Test Method for Determining Specific Heat Capacity by Differential Scanning Calorimetry
ASTM E96/E96M	Standard Test Method for Water Vapor Transmission of Materials
ISO 11357-3	Plastics-Differential Scanning Calorimetry (DSC) - Part 3: Determination of Temperature and Enthalpy of Melting and Crystallization
ISO 3451 Part 1	Plastics-Determination of Ash

Resins and Rubbers

ASTM D2240 Type A, D	Test Method for Rubber Property - Durometer Hardness
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ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY

Occupational Health and Safety:

Air Monitoring

ASTM D3464*	Test Method for Average Velocity in a Duct Using a Thermal Anemometer
ASTM D4490*	Practice for Measuring the Concentration of Toxic Gases or Vapors Using Detector Tubes
AWS F1.1M*	Method for Sampling Airborne Particulates Generated by Welding and Allied Processes
NIOSH 0500 Modified*	Particulates Not Otherwise Regulated, Total
NIOSH 0600 Modified*	Particulates Not Otherwise Regulated, Respirable
NIOSH 1501*	Hydrocarbons, Aromatic
NIOSH 5026*	Oil Mist, Mineral
NIOSH 7300*	Elements by ICP (Nitric/Perchloric Acid Ashing)
NIOSH 7602*	Silica, Crystalline by IR (KBr pellet)
NIOSH 7903*	Acids, Inorganic
OSHA 7*	Organic Vapours
QTP 41M*	Test Method for Carbon Monoxide in the Atmosphere (Continuous Measurement by Nondispersive Infrared Spectrometry)

Asbestos by PLM

EPA/600/R-93/116	Test Method for the Determination of Asbestos in Bulk Building Materials
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Noise

CSA Z107.56*	Procedures for the Measurement of Occupational Noise Exposure
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Personal Protection

16 CFR 1610	Standard for the Flammability of Clothing Textiles Only for: Step 1 Original State - Plain Surface Textile Fabric
42 CFR Part 84 Subpart K	Respiratory Protective Devices Except for: Non-powered air-purifying particulate respirators (series R and P) Powered air-purifying particulate respirators (PAPR classes HE and PAPR100)
AATCC 42	Water Resistance: Impact Penetration Test
AATCC 127	Water Resistance: Hydrostatic Pressure Test
ANSI / ISEA Z87.1	American National Standard Occupational and Educational Personal Eye and Face Protection Devices Only for: Section 9.6 - Drop Ball Test Section 9.7 - Ignition Test Section 9.11 - High Mass Impact Test Section 9.17.2 - Droplet and Splash Test on Faceshields
ASTM F1670 / F1670M	Standard Test Method for Resistance of Materials Used in Protective Clothing to Penetration by Synthetic Blood
ASTM F1862 / F1862M	Standard Test Method for Resistance of Medical Face Masks to Penetration by Synthetic Blood (Horizontal Projection of Fixed Volume at a Known Velocity)
ASTM F2100	Standard Specification for Performance of Materials Used in Medical Face Masks (excluding bacterial filtration efficiency)
ASTM F2299*	Standard Test Method for Determining the Initial Efficiency of Materials Used in Medical Face Masks to Penetration by Particulates Using Latex Spheres
ASTM F3502	Standard Specification for Barrier Face Coverings

	<p>Only for: Section 8.1 – Sub-Micron Particulate Filtration Efficiency Section 8.2 – Airflow Resistance</p>
CSA Z94.3	<p>Eye and Face Protectors</p> <p>Only for: Section 12.3 - Ignition Resistance Test</p>
EN 14683	<p>Medical face masks - Method for determination of breathability (differential pressure)</p> <p>Only for: Annex C</p>
ISO 16603	<p>Clothing for protection against contact with blood and body fluids - Determination of the resistance of protective clothing materials to penetration by blood and body fluids - Test method using synthetic blood</p>
ISO 22609	<p>Clothing for protection against infectious agents - Medical face masks - Test method for resistance against penetration by synthetic blood (fixed volume, horizontally projected)</p>
NIOSH TEB-APR-STP-0003	<p>Determination of Exhalation Resistance Test, Air-Purifying Respirators Standard Testing Procedure (STP)</p>
NIOSH TEB-APR-STP-0004	<p>Determination of Exhalation Valve Leakage Test, Air-Purifying Respirators Standard Testing Procedure (STP)</p>
NIOSH TEB-APR-STP-0007	<p>Determination of Inhalation Resistance Test, Air-Purifying Respirators Standard Testing Procedure (STP)</p>
NIOSH TEB-APR-STP-0057	<p>Determination of Particulate Filter Efficiency Level for N100 Series Filters Against Solid Particulates for Non-Powered, Air-Purifying Respirators Standard Testing Procedure (STP)</p>
NIOSH TEB-APR-STP-0058	<p>Determination of Particulate Filter Efficiency Level for N99 Series Filters Against Solid Particulates for Non-Powered, Air-Purifying Respirators Standard Testing Procedure (STP)</p>
NIOSH TEB-APR-STP-0059	<p>Determination of Particulate Filter Efficiency Level for N95 Series Filters Against Solid Particulates</p>

	for Non-Powered, Air-Purifying Respirators Standard Testing Procedure (STP)
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MARKETPLACE PRODUCTS-CONSUMER AND BUSINESS

Furniture and Consumer Articles:

Hazardous Products

BS EN 71-1	Safety of Toys - Part 1: Mechanical And Physical Properties Except for: Section 8.15 - Leakage of liquid filled Toys and Section 8.17 - Durability of mouth-actuated toys Section 8.22 - Dynamic strength Section 8.26 - Brake performance Section 8.27 - Strength of toy scooter steering tubes Section 8.28 - Determination of emission sound pressure levels Section 8.31 - Toy chest lids Section 8.35 - Magnetic flux index
Health Canada Method C-02.2	Determination of Total Lead in Surface Coating Materials in Consumer Products
Health Canada Method C-02.3	Determination of Total Lead in Polyvinyl Chloride Products by Closed Vessel Microwave Digestion
Health Canada Method C-02.4	Determination of Total Lead and Cadmium in Metallic Consumer Products
Health Canada Method C03	Determination of Leachable Arsenic (As), Selenium (Se), Cadmium (Cd), Antimony (Sb), and Barium (Ba) in Applied Coatings
Health Canada Method M00.1	Small Components
Health Canada Method M00.2	Sharp Edges
Health Canada Method M00.3	Sharp Points
Health Canada Method M01.1	Reasonably Foreseeable Use - Toys

Household Products

16 CFR Part 1303	Ban Of Lead-Containing Paint And Certain Consumer Products Bearing Lead-Containing Paint
16 CFR Part 1500.44	Method of Determining Extremely Flammable and Flammable Solids
16 CFR Part 1700.20	Testing Procedure for Special Packaging

ASTM D1976	Test Method for Elements in Water by Inductively Coupled Argon Plasma Atomic Emission Spectroscopy, including extraction methods EPA Method 3050B, EPA Method 3051A, EPA Method 3052, QTP 25M
ASTM F2517	Standard Specification for Determination of Child Resistance of Portable Fuel Containers for Consumer Use
CPSC-CH-C1001-09.4	Standard Operating Procedure for Determination of Phthalates
CPSC-CH-E1001-08.3	Standard Operating Procedure for Determining Total Lead (Pb) in Children's Metal Products (Including Children's Metal Jewelry)
CPSC-CH-E1002-08.3	Standard Operating Procedure for Determining Total Lead (Pb) in Non-Metal Children's Products
CPSC-CH-E1003-09.1	Standard Operating Procedure for Determining Lead (Pb) in Paint and Other Similar Surface Coatings
CSA Z76.1	Reclosable Child Resistant Packages
Health Canada Method C-23	Determination of the Flame Projection and Flashback of Consumer Products Enclosed in Pressurized Containers
Health Canada Method C-34 Modified	Determination of Phthalates in Polyvinyl Chloride Consumer Products
ISO 8317	Child resistant packaging - Requirements and testing procedures for reclosable packages

Toys

16 CFR Part 1500.50-53	Test Method for Simulating Use and Abuse of Toys and Other Articles Intended for Use by Children
16 CFR Part 1501	Method for Identifying Toys and Other Articles Intended for Use by Children under 3 Years of Age which Present Choking, Aspiration, or Ingestion Hazards Because of Small Parts
16 CFR Part 1510	Requirements for rattles
16 CFR Part 1511	Requirements for Pacifiers
ASTM F963-17	Standard Consumer Safety Specification for Toy Safety Only for: Section 4.3.5.1 - Paint and Similar Surface Coating Materials

	<p>Section 4.3.5.1(2) - Surface Coating Materials - Soluble Test for Metals</p> <p>Section 4.3.5.2 - Toy Substrate Materials</p> <p>Section 4.6 - Small Objects (except labeling and/or instructional literature requirements)</p> <p>Section 4.7 - Accessible Edges (except labeling and/or instructional literature requirements)</p> <p>Section 4.8 - Projections (except bath toy projections)</p> <p>Section 4.9 - Accessible Points (except labeling and/or instructional literature requirements)</p> <p>Section 4.10 - Wires or Rods</p> <p>Section 4.11 - Nails and Fasteners</p> <p>Section 4.12 - Packaging Film</p> <p>Section 4.13 - Folding Mechanisms and Hinges, excluding Toy Chests</p> <p>Section 4.14 - Cords, Straps, and Elastics</p> <p>Section 4.15 - Stability and Overload Requirements</p> <p>Section 4.16 - Confined Space</p> <p>Section 4.17 - Wheels, Tires, and Axles</p> <p>Section 4.18 - Holes, Clearance, and Accessibility of Mechanisms</p> <p>Section 4.19 - Simulated Protective Devices</p> <p>Section 4.20.2 - Toy Pacifiers</p> <p>Section 4.21 - Projectile Toys</p> <p>Section 4.22 - Teethers and Teething Toys</p> <p>Section 4.23.1 - Rattles with nearly spherical, hemispherical, or circular flare ends</p> <p>Section 4.24 - Squeeze Toys</p> <p>Section 4.27 - Stuffed and Beanbag-Type Toys</p> <p>Section 4.32 - Certain Toys with Nearly Spherical Ends</p> <p>Section 4.35 - Pompoms</p> <p>Section 4.36 - Hemispheric Shaped Objects</p> <p>Section 4.39 - Jaw Entrapment in Handles and Steering Wheels</p>
BS EN 71-3	Safety of Toys - Part 3: Migration of Certain Elements

METALLIC ORES AND PRODUCTS

Articles of Metal:

All Forms, Articles of Metal

ASTM E139	Standard Test Methods for Conducting Creep, Creep-Rupture, and Stress Rupture Tests of Metallic Materials Only for: Stress Rupture
ASTM E292	Standard Test Methods for Conducting Time-for-Rupture Notch Tension Testing of Materials
ASTM E399	Standard Test Method for Linear-Elastic Plane-Strain Fracture Toughness of Metallic Materials
ASTM E466	Standard Practice for Conducting Force Controlled Constant Amplitude Axial Fatigue Tests of Metallic Materials

NON-METALLIC MINERALS AND PRODUCTS

Ceramics, Clay and Clay Products:

Ceramics, Clays, Bricks and Structural Tile, Porcelain Enamels, Refractory and Firebrick

ASTM D6349	Standard Test Method for Determination of Major and Minor Elements in Coal, Coke, and Solid Residues from Combustion of Coal and Coke by Inductively Coupled Plasma - Atomic Emission Spectrometry
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Petroleum Refinery Products (including asphalt materials, petrochemicals, fuels and lubricants):

Fuels and Lubricants

ASTM D92	Test Method for Flash and Fire Points by Cleveland Open Cup Tester
ASTM D93	Test Methods for Flash-Point by Pensky Martens Closed Cup Tester
ASTM E1064	Standard Test Method for Water in Organic Liquids by Coulometric Karl Fischer Titration
ASTM E1858	Test Method for Determining Oxidation Induction Time of Hydrocarbons by Differential Scanning Calorimetry
Ford ES5L2P-7W092-AA	Transmission Contamination Specification
Ford ESBC3P-7W092-BA	Transmission Contamination Specification

ISO 4406	Hydraulic Fluid Power - Fluids - Method for coding the level of contamination by solid particles
ISO 4407	Hydraulic Fluid Power - Fluid Contamination - Determination of particulate contamination by the counting method using an optical microscope

Soil, Aggregates, Stone, Sand:

Aggregates (Stone and Sand)

ASTM D6349	Listed under Ceramics; Clay and Clay Products
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Number of Scope Listings: 96

Notes:

ISO/IEC 17025:2017: General Requirements for the Competence of Testing and Calibration Laboratories

ASTM: American Society for Testing and Materials

AWS: American Welding Society

BS: British Standard

CFR: Code of Federal Regulations

CSA: Canadian Standards Association

EPA: Environmental Protection Agency

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

QTP: Internal Procedure

* Sampling for these methods may be performed on-site by the laboratory.



This document forms part of the Certificate of Accreditation issued by the Standards Council of Canada (SCC). The original version is available in the Directory of Accredited Laboratories on the SCC website at www.scc.ca.

Elias Rafoul
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