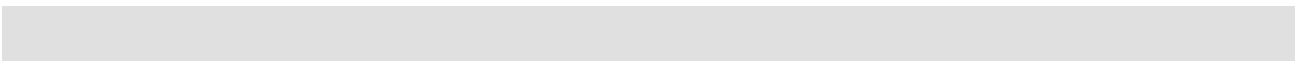




**Classes of Test**

**Chemical Testing**

**December 2016**



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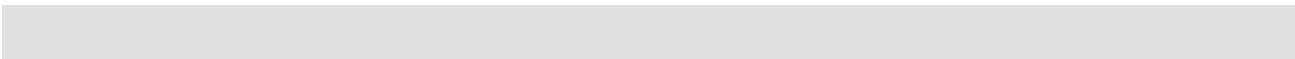
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## Classes of Test

### Chemical Testing

The following is a listing of the classes and subclasses of tests available in the field of Chemical Testing.

The classes of test shown below are a first order description of a facility's accreditation coverage. Most accreditations are described in more detail and usually include reference to specific determinations, analytical techniques, relevant standard test methods and specifications or in-house test methods and, in some cases, include analytical ranges and limits of reporting. Some tests are listed in the fields of Biological Testing or Mechanical Testing as well as in the field of Chemical Testing. Accreditation for these tests may be granted in whichever field of testing best suits the facility concerned.

Accreditation may be granted for tests performed in mobile laboratories, field laboratories or locations, or marine test rafts as well as in formal laboratory accommodation. Where the existing classes of test do not cover the needs of a facility, the Chemical Testing Accreditation Advisory Committee welcomes proposals for additional classes to be included in this field.

- 7.01 Metals and alloys
  - .01 Ferrous materials
  - .11 Copper and copper alloys
  - .12 Aluminium and aluminium alloys
  - .13 Tin and tin alloys
  - .14 Lead and lead alloys
  - .15 Magnesium and magnesium alloys
  - .16 Zinc and zinc alloys
  - .17 Nickel, chromium, cobalt and their alloys
  - .18 Titanium and titanium alloys
  - .19 Tungsten and tungsten alloys
  - .31 Precious metals
  - .71 Sampling
  - .91 Other tests
  - .99 Other metals and alloys
  
- 7.02 Metallic coatings and treatment solutions
  - .01 Metallic coatings
  - .02 Conversion coatings
  - .11 Plating solutions
  - .21 Anodising solutions
  - .31 Metal finishing materials
  - .71 Sampling
  
- 7.03 Ores and minerals
  - .01 Iron ores
  - .02 Copper ores
  - .03 Aluminium ores
  - .04 Tin ores

- .05 Lead ores
  - .06 Zinc ores
  - .07 Nickel ores
  - .08 Manganese ores
  - .09 Molybdenum ores
  - .10 Tungsten ores
  - .11 Chromium ores
  - .12 Uranium ores
  - .13 Magnesium ores
  - .18 Precious metal ores
  - .19 Other ores
  - .30 Silicate rocks
  - .31 Mineral sands
  - .32 Silica sands
  - .33 Limestone and dolomite
  - .34 Gypsum
  - .35 Phosphate rock
  - .36 Asbestos
  - .39 Other minerals
  - .61 Metallurgical products
  - .71 Sampling
  - .81 Sieve analysis
  - .82 Heavy liquid tests
  - .91 Thermal analyses
  - .99 Geochemical samples for trace elements
- 7.08 Corrosion tests
- .01 Salt spray tests
  - .02 Dezincification tests
  - .10 Other tests
- 7.11 Cements, concrete and related products
- .01 Portland cement
  - .02 Blended cement
  - .03 Masonry cement
  - .11 Pozzolans
  - .31 Concrete
  - .32 Mortar
  - .33 Fibre cement
  - .41 Aggregates
  - .51 Other materials
  - .71 Sampling
- 7.12 Clays, ceramics and related materials
- .01 Clays
  - .02 Ceramics
  - .03 Refractories
  - .04 Lime
  - .05 Glass
  - .71 Sampling

- 7.14 Shale oil
  - .01 Sampling
  - .11 Chemical tests
  - .99 Other tests
  
- 7.15 Crude petroleum
  - .01 Sampling
  - .11 Chemical tests
  
- 7.16 Fuels
  - .01 Gaseous fuels
  - .02 Liquid fuels
  - .03 Coals and coke
  - .04 Charcoal
  - .05 Other solid fuels
  - .06 Biofuels and blends
  - .11 Octane number rating
  - .71 Sampling
  
- 7.17 Lubricants
  - .01 Oils and greases
  - .02 Solid lubricants
  - .71 Sampling
  
- 7.19 Bituminous materials
  - .01 Bitumens and asphalts
  - .02 Tars and tar products
  - .13 Bituminous mixtures
  - .71 Sampling
  
- 7.20 Solvents
  - .11 Chemical tests
  - .12 Physical tests
  - .71 Sampling
  
- 7.21 Miscellaneous petroleum products
  - .01 Waxes
  - .02 Petrolatums
  - .03 White oils
  - .04 Antifreeze and de-icing fluids
  - .05 Hydraulic fluids
  - .06 Additives to fuels and lubricants
  - .07 Temporary corrosion preventives
  - .08 Electrical insulating oils and compounds
  - .09 Petrochemical feedstocks
  - .10 Soluble and emulsifying oils
  - .71 Sampling
  
- 7.22 Trace analyses in petroleum products

- 7.26 Paints and related surface coatings
  - .11 Chemical tests
  - .21 Physical tests
  - .31 Outdoor weathering tests
  - .32 Marine underwater tests
  - .33 Fresh water immersion tests
  - .35 Humidity tests
  - .36 Salt spray tests
  - .37 Artificial weathering tests
  - .71 Sampling
  
- 7.27 Resins
  - .01 Sampling
  - .11 Chemical tests
  - .12 Physical tests
  
- 7.28 Pigments
  - .01 Sampling
  - .11 Chemical tests
  - .12 Physical tests
  
- 7.31 Explosives and associated materials
  - .11 Chemical analyses
  - .12 Stability tests
  - .13 Physical tests
  - .71 Sampling
  
- 7.35 Carbon black
  - .01 Sampling
  - .11 Chemical tests
  - .12 Physical tests
  
- 7.36 Rubber
  - .11 Chemical analyses
  - .12 Dispersion of carbon black
  - .13 Resistance to chemicals
  - .14 Swelling in liquids
  - .15 Permeability
  - .16 Water vapour absorption
  - .21 Density and specific gravity
  - .22 Flammability tests
  - .23 Hardness
  - .24 Electrical resistance
  - .31 Accelerated weathering tests
  - .32 Outdoor weathering tests
  - .81 Sampling
  - .99 Other tests

- 7.37 Plastics
  - .11 Chemical analyses
  - .12 Resistance to chemicals
  - .13 Water vapour transmission
  - .14 Permeability
  - .21 Density and specific gravity
  - .22 Flammability tests
  - .23 Electrical resistance
  - .24 Thermal properties
  - .25 Flow properties
  - .26 Thermal analyses
  - .31 Colour fastness
  - .41 Accelerated ageing tests
  - .42 Outdoor weathering tests
  - .81 Sampling
  - .99 Other tests
  
- 7.38 Leather
  - .11 Chemical analyses
  - .12 Physical tests
  - .71 Sampling
  
- 7.39 Adhesives and sealants
  - .11 Chemical analyses
  - .12 Physical tests
  - .71 Sampling
  
- 7.46 Textiles and related products
  - .11 Identification of fibres
  - .12 Quantitative analysis of mixtures and blends
  - .13 Chemical tests
  - .21 Electrical resistance
  - .22 Flammability tests
  - .23 Resistance to insect attack
  - .31 Colour fastness
  - .81 Sampling
  - .99 Other tests
  
- 7.47 Paper, paperboard and pulp
  - .11 Fibre composition
  - .12 Chemical analyses
  - .13 Water vapour transmission
  - .81 Sampling
  - .99 Other tests
  
- 7.51 Foods
  - .01 Cereal products
  - .02 Nuts and nut products
  - .03 Dairy products
  - .04 Meat and meat products
  - .05 Fish, crustaceans and molluscs
  - .06 Sugar and sugar products

- .07 Confectionery
- .08 Fruit, jams and other fruit products
- .09 Vegetables and vegetable products
- .10 Alcoholic beverages
- .11 Soft drinks and cordials
- .12 Fruit juices and concentrates
- .13 Edible fats and oils
- .14 Margarine
- .15 Eggs and egg products
- .21 Pet foods
- .31 Antioxidants in foods
- .32 Colorants in foods
- .33 Preservatives in foods
- .34 Allergens
- .35 Other food additives
- .49 Other food products
- .51 Vitamins in foods
- .61 Shelf-life tests
- .71 Sensory evaluation tests
- .81 Sampling

7.52 Residues and contaminants in foods and agricultural materials

- .01 Elements
- .02 Pesticides
- .03 Veterinary Chemicals
- .04 Insect infestation
- .05 Mycotoxins
- .07 Polyhalogenated biphenyls
- .23 Chlorinated dioxins and dibenzofurans
- .60 Ionising radiation (measurement of alpha, beta, gamma and neutron radiations)
- .71 Sampling
- .99 Other residues and contaminants

7.56 Drugs and pharmaceuticals

- .01 Drugs
- .02 Medicinal and veterinary preparations
- .03 Vitamins
- .04 Antibiotics
- .05 Hormones
- .06 Vaccines and sera
- .07 Enzymes
- .08 Chemicals used in compounding pharmaceuticals
- .71 Sampling

7.57 Cosmetics, perfumes and essential oils

- .01 Cosmetics
- .02 Perfumes
- .03 Essential oils
- .04 Hygiene products
- .71 Sampling



- 7.58 Fats, oils and waxes
  - .01 Animal sources
  - .02 Vegetable sources
  - .71 Sampling
  
- 7.59 Detergents and related products
  - .01 Soaps
  - .02 Synthetic detergents
  - .03 Wetting and emulsifying agents
  - .06 Biodegradability tests
  - .11 Fire prevention foams
  - .71 Sampling
  
- 7.61 Agricultural products and materials
  - .01 Cereal grains and by-products
  - .02 Oil seeds and by-products
  - .03 Stockfoods
  - .04 Vitamins in stockfoods
  - .05 Wood and timber treatment materials
  - .11 Insecticide and acaricide formulations
  - .12 Herbicide formulations
  - .13 Fungicide formulations
  - .19 Tobacco and tobacco products
  - .21 Fertilizers and liming materials
  - .22 Soils
  - .23 Plant tissue
  - .24 Compost
  - .71 Sampling
  - .99 Other agricultural products
  
- 7.65 Air
  - .01 Industrial emissions
  - .02 Ambient air
  - .03 Soil vapour intrusion
  - .05 Indoor air
  - .06 Meteorological monitoring
  - .71 Sampling
  
- 7.66 Waters
  - .01 Waters for potable and domestic purposes
  - .02 Waters for irrigation and stock
  - .03 Waters for industrial and steam-raising purposes
  - .04 Sewage
  - .05 Trade wastes
  - .06 Saline waters
  - .07 Ground waters
  - .71 Sampling
  - .99 Other waters

- 7.70 Gases and aerosols
  - .01 Industrial gases
  - .02 Gases for medical use and diving gases
  - .03 Calibration gases and mixtures
  - .04 Industrial fumes and emissions
  - .05 Atmospheric pollution
  - .71 Sampling
  - .99 Other gases and mixtures
  
- 7.71 Biological monitoring
  - .01 Blood alcohol
  - .02 Elements
  - .03 Fluoride
  - .11 Pesticide residues
  - .12 Agricultural chemical residues
  - .21 Drugs and drug metabolites
  - .71 Sampling
  - .99 Other substances
  
- 7.75 Calibration of instruments
  - .01 Gas analysers
  - .02 Breath analysers
  - .03 Particulate air samplers
  - .04 Flow measurement devices
  - .05 Dynamic gas blenders
  - .11 Hydrometers
  - .99 Other instruments to Class of test 7.75
  
- 7.78 Mine safety equipment
  - .01 Gas instruments
  - .02 Respirators
  
- 7.81 Constituents of the environment
  - .11 Waters other than saline
  - .12 Saline waters
  - .21 Air
  - .31 Soils
  - .32 Sediments
  - .33 Solid wastes
  - .34 Biosolids
  - .35 Leachate procedures
  - .41 Atmospheric dust fall
  - 51 Biota
  - .71 Sampling
  
- 7.82 Workplace environment and hazards
  - .01 Asbestos fibre counting
  - .02 Respirable quartz
  - .03 Inhalable dust
  - .04 Respirable dust
  - .05 Organic vapours
  - .06 Metals and metal compounds

- .07 Inorganic gases
  - .08 Synthetic mineral fibre counting
  - .09 Welding fumes and gases
  - .10 Air in confined spaces
  - .11 Mine atmospheres
  - .12 Mine roadway dusts
  - .13 Isocyanates
  - .14 Ionising radiation (measurement of alpha, beta, gamma and neutron radiations)
  - .21 Engine emissions
  - .22 Diesel particulates
  - .31 Asbestos fibre identification
  - .71 Sampling
  - .81 Volume measurement (air)
  - .99 Other substances
- 7.84 Residues and contaminants in constituents of the environment
- .01 Elements
  - .02 Pesticides
  - .03 Polyhalogenated biphenyls
  - .04 Halogenated hydrocarbons
  - .05 Phenols
  - .06 Phthalates
  - .11 Hydrocarbons
  - .12 Petroleum hydrocarbons
  - .13 Mineral oils
  - .21 Monocyclic aromatic hydrocarbons
  - .22 Polycyclic aromatic hydrocarbons
  - .23 Chlorinated dioxins and dibenzofurans
  - .24 Polybrominated diphenylethers
  - .31 Asbestos
  - .35 Cyanide
  - .41 Explosives
  - .51 Nutrients
  - .52 Environment level nutrients
  - .60 Ionising radiation (measurement of alpha, beta, gamma and neutron radiations)
  - .71 Sampling
  - .99 Other substances
- 7.90 Motor vehicles
- .01 Vehicle emissions
  - .02 Fuel consumption tests
  - .99 Other tests
- 7.94 Particle sizing

- 7.95 Laboratory reagents
  - .11 Chemical tests
  - .12 Physical tests
  - .71 Sampling
  
- 7.97 Miscellaneous materials and products
  - .11 Chemical tests
  - .12 Physical tests
  - .71 Sampling
  - .99 Other tests
  
- 7.98 Investigative testing
  
- 7.99 Approval
  - .01 Approved asbestos fibre counters
  - .02 Approved asbestos fibre identifiers

## Amendment Table

The table below provides a summary of changes made to the document with this issue.

Class or subclass	Amendment
7.82.14	Ionising radiation. New subclass of test added.