

## ECLA EUROPEAN CLASSIFICATION

### B01L

#### CHEMICAL OR PHYSICAL LABORATORY APPARATUS FOR GENERAL USE

(apparatus for medical or pharmaceutical purposes A61; apparatus for industrial purposes or laboratory apparatus whose construction and performance are comparable to that of similar industrial apparatus, see the relevant classes for industrial apparatus, particularly subclasses of B01 and C12; separating or distilling apparatus B01D; mixing or stirring devices B01F; atomisers B05B; [N: vibrating devices, e.g. shaking tables,] sieves B07B; corks, bungs B65D; handling liquids in general B67; vacuum pumps F04; siphons [F04F10/00](#); taps, stop-cocks F16K; tubes, tube joints F16L; apparatus specially adapted for investigating or analysing materials G01, particularly G01N; electrical or optical apparatus, see the relevant classes in Sections G and H)

[N: **WARNING** [C2012.06]

1. The following IPC groups are not used in the internal ECLA classification scheme. Subject matter covered by these groups is classified in the following ECLA groups:
  - [B01L3/14](#) covered by [B01L3/50](#)
2. Groups [B01L1/50](#), [B01L3/50-B01L3/569](#), [B01L7/50-B01L7/54](#), [B01L9/50-B01L9/547](#) do not correspond to former or future IPC groups.  
Concordance ECLA : IPC for these groups is as follows:
  - [B01L1/50](#) : [B01L1/00](#) - [B01L3/50](#) - [B01L3/502](#) : [B01L3/00](#) - [B01L3/5021](#) - [B01L3/50215](#) : [B01L3/14](#) - [B01L3/5023](#) - [B01L3/508](#) : [B01L3/00](#) - [B01L3/5082](#) - [B01L3/50825](#) : [B01L3/14](#) - [B01L3/5085](#) - [B01L3/569](#): [B01L3/00](#) - [B01L7/50](#) - [B01L7/54](#) : [B01L7/00](#) - [B01L9/50](#) - [B01L9/547](#) : [B01L9/00](#)

]

#### Note

This subclass covers only laboratory apparatus which is either applicable solely to laboratory purposes or which, by reason of its simple construction and adaptability, is such as would not be suitable for industrial use.

### B01L1/00

**Enclosures; Chambers** (fume cupboards [B08B](#); provided with manipulation devices, glove boxes [B25J](#); cooling chambers [F25D](#))

### B01L1/02

- . Air-pressure chambers; Air-locks therefor

### B01L1/02B

- . . [N: Environmental chambers (incubators for culturing cells C12M41/14, Test chambers to test weather resistance G01N17/00A)] [N1204]

### B01L1/04

- . Dust-free rooms or enclosures [N: (clean rooms suitable for industrial purposes [F24F3/16B5](#))]

### B01L1/50

- . [N: for storing hazardous materials in the laboratory, e.g. cupboards, waste containers] [N1204]

### B01L3/00

**Containers or dishes for laboratory use, e.g. laboratory glassware** (bottles B65D; apparatus for enzymology or microbiology [N: specially adapted for culturing] [C12M1/00](#)); **Droppers (receptacles for volumetric purposes G01F)** [C0905]

### B01L3/02

- . Burettes; Pipettes

- B01L3/02B . . [N: Burettes, i.e. for withdrawing and redistributing liquids through different conduits]
- B01L3/02B2 . . . [N: of the plunger pump type]
- B01L3/02C . . [N: Pipettes, i.e. with only one conduit for withdrawing and redistributing liquids]
- B01L3/02C1 . . . [N: Accessories for glass pipettes; Gun-type pipettes, e.g. safety devices, pumps] [N1204]
- B01L3/02C3 . . . [N: of the plunger pump type (medical syringes [A61M](#))]
- B01L3/02C3C . . . . [N: Capillary pipettes, i.e. having very small bore ([B01L3/02C3D](#) to [B01L3/02C3S](#) take precedence)]
- B01L3/02C3D . . . . [N: having mechanical means to set stroke length, e.g. movable stops ([B01L3/02C3P](#), [B01L3/02C3R](#) take precedence)]
- B01L3/02C3M . . . . [N: Details of motor drive means ([B01L3/02C3P](#), [B01L3/02C3R](#) take precedence)]
- B01L3/02C3P . . . . [N: having several coaxial pistons]
- B01L3/02C3R . . . . [N: Repeating pipettes, i.e. for dispensing multiple doses from a single charge]
- B01L3/02C3S . . . . [N: Details of electronic control, e.g. relating to user interface] [N1204]
- B01L3/02D . . [N: Drop counters; Drop formers (making arrays for combinatorial libraries [B01J19/00C](#); automation of dispensing for analysis [G01N35/10](#) )] [C0309]
- B01L3/02D2 . . . [N: using pins] [N0309]
- B01L3/02D2P . . . . [N: Prongs, quill pen type dispenser] [N0612]
- B01L3/02D2R . . . . [N: Pin and ring type or pin in tube type dispenser] [N0612]
- B01L3/02D2T . . . . [N: characterized by the form or material of the pin tip] [N0607]
- B01L3/02D4 . . . [N: using stamps] [N0612]
- B01L3/02D6 . . . [N: using touch-off at substrate or container] [N0612]
- B01L3/02D8 . . . [N: using valves to interrupt or meter fluid flow, e.g. using solenoids or metering valves] [N0612]
- B01L3/02D10 . . . [N: using pulse dispensing or spraying, eg. inkjet type, piezo actuated ejection of droplets from capillaries] [N0612]
- B01L3/02D12 . . . [N: Dropper bottles] [N0612]
- B01L3/02E . . [N: Interchangeable or disposable dispensing tips]
- B01L3/02E2 . . . [N: co-operating with positive ejection means]
- B01L3/02F . . [N: mounted within a receptacle (wash bottles [B01L3/10](#))]
- B01L3/02G . . [N: Ergonomic aspects, e.g. form or arrangement of controls] [N1204]
- B01L3/02H . . [N: Apparatus for withdrawing or distributing predetermined quantities of fluid (B01L3/02 takes precedence; sample taking [G01N1/00](#); sample taking within automatic analysers [G01N35/00](#); volume measuring in general [G01F](#))] [N1204]
- B01L3/02H2 . . . [N: for liquids] [N1204]
- B01L3/02H2B . . . . [N: from piercable tubing, e.g. in extracorporeal blood sampling] [N1204]
- B01L3/04 . Crucibles
- B01L3/06 . Crystallising dishes
- B01L3/08 . Flasks (specially adapted for distillation [B01D](#) [N: [B01D3/10](#)])
- B01L3/10 . Wash bottles

- B01L3/12 . Gas jars or cylinders
- B01L3/14 . Test tubes [N: (devices for taking samples of blood [A61B5/14](#))] (not used, see [B01L3/50](#) and subgroups) [C1206]  
 [N: **WARNING** [N1205]  
 This is no longer used for the classification of new documents as from 1 April 2012.  
 The back-file is being transferred to [B01L3/50](#) and subgroups  
 ]
- B01L3/16 . Retorts
- B01L3/18 . Spatulas
- B01L3/50 . [N: Containers for the purpose of retaining a material to be analysed, e.g. test tubes (devices for taking samples of blood [A61B5/14](#))] [N1204]
- B01L3/502 . . [N: with fluid transport, e.g. in multi-compartment structures (centrifugal-type cuvettes [G01N21/07](#); analysis by separation into components [G01N30/00](#); automatic analysers [G01N35/00](#))] [N1204]
- B01L3/5021 . . . [N: Test tubes specially adapted for centrifugation purposes (centrifuges [B04B5/04](#))] [N1204]
- B01L3/50215 . . . . [N: using a float to separate phases] [N1204]
- B01L3/5023 . . . [N: with a sample being transported to, and subsequently stored in an absorbent for analysis] [N1204]
- B01L3/5025 . . . [N: for parallel transport of multiple samples] [N1204]
- B01L3/50255 . . . . [N: Multi-well filtration] [N1204]
- B01L3/5027 . . . [N: by integrated micro-fluidic structures, i.e. dimensions of channels and chambers are such that surface tension forces are important, e.g. lab-on-a-chip ([B01L3/5023](#) takes precedence; micromixers [B01F13/00M](#); microreactors for synthesis [B01J19/00R](#); micro-capillary devices in general [B81B1/00](#))] [N1204]
- B01L3/5027A . . . . [N: characterised by the manufacture of the container or its components (manufacture of micro-structural devices in general [B81C](#); by shaping or joining plastic parts [B29C59/00](#) [B29C65/00](#), by laminating [B32B37/00](#))] [N1204]
- B01L3/5027B . . . . [N: characterised by interfacing components, e.g. fluidic, electrical, optical or mechanical interfaces] [N1204]
- B01L3/5027C . . . . [N: characterised by venting arrangements] [N1204]
- B01L3/5027D . . . . [N: characterised by the means or forces applied to move the fluids (micro pumps [F04B19/00M](#), of the membrane type [F04B43/04M](#))] [N1204]
- B01L3/5027E . . . . [N: characterised by integrated valves (microvalves [F16K99/00M](#))] [N1204]
- B01L3/5027F . . . . [N: characterised by the means for controlling flow resistance, e.g. flow controllers, baffles ([B01L3/5027E](#) takes precedence)] [N1204]
- B01L3/5027G . . . . [N: characterised by bulk separation arrangements on lab-on-a-chip devices, e.g. for filtration or centrifugation (separation in general [B01D](#); micro-apparatus for analysis using electrophoresis [G01N27/447C7](#); sample preparation [G01N1/28](#))] [N1204]
- B01L3/5027H . . . . [N: specially adapted for handling suspended solids or molecules independently from the bulk fluid flow, e.g. for trapping or sorting beads, for physically stretching molecules (investigating characteristics of particles [G01N15/00](#))] [N1204]
- B01L3/5027J . . . . [N: characterised by multiphase flow arrangements] [N1204]

- B01L3/5027J2 . . . . . [N: specially adapted for focusing or laminating flows] [N1204]
- B01L3/5027J4 . . . . . [N: specially adapted for droplet or plug flow, e.g. digital micro-fluidics (automatic analysis using a stream of discrete samples in a tube system G01N35/08)] [N1204]
- B01L3/5027J4B . . . . . [N: for moving individual droplets on a plate, e.g. by locally altering surface tension] [N1204]
- B01L3/5029 . . . [N: using swabs] [N1204]
- B01L3/505 . . [N: flexible containers not provided for above] [N1204]
- B01L3/5055 . . . [N: Hinged, e.g. opposable surfaces] [N1204]
- B01L3/508 . . [N: rigid containers not provided for above] [N1204]
- B01L3/5082 . . . [N: Test tubes per se] [N1204]
- B01L3/50825 . . . . [N: Closing or opening means, corks, bungs (closures for containers B65D; means for removing stoppers B67B7/02)] [N1204]
- B01L3/5085 . . . [N: for multiple samples, e.g. micro-titration plates] [N1204]
- B01L3/50851 . . . . [N: specially adapted for heating or cooling samples (laboratory heating apparatus B01L7/00; incubators C12M)] [N1204]
- B01L3/50853 . . . . [N: with covers or lids] [N1204]
- B01L3/50855 . . . . [N: using modular assemblies of strips or of individual wells] [N1204]
- B01L3/50857 . . . . [N: using arrays or bundles of open capillaries for holding samples] [N1204]
- B01L3/5088 . . . [N: confining liquids at a location by surface tension, e.g. virtual wells on plates, wires (B01L3/50857 takes precedence)] [N1204]
- B01L3/52 . . [N: Containers specially adapted for storing or dispensing a reagent (B01L3/02 takes precedence; containers for medical or pharmaceutical purposes A61J1/00; containers in general B65D; storing or dispensing test elements G01N33/487E; automated reagent dispensing G01N35/10A)] [N1204]
- B01L3/523 . . [N: with means for closing or opening] [N1204]
- B01L3/527 . . [N: for a plurality of reagents] [N1204]
- B01L3/54 . . [N: Labware with identification means (identification of carriers, materials or components in automatic analysers G01N35/00G3C)] [N1204]
- B01L3/545 . . [N: for laboratory containers] [N1204]
- B01L3/5453 . . . [N: for test tubes] [N1204]
- B01L3/5457 . . . [N: for container closures] [N1204]
- B01L3/56 . . [N: Labware specially adapted for transferring fluids] [N1204]
- B01L3/561 . . [N: Tubes; Conduits (in general F16L)] [N1204]
- B01L3/563 . . [N: Joints or fittings (in general F16L); Separable fluid transfer means to transfer fluids between at least two containers, e.g. connectors] [N1204]
- B01L3/5635 . . . [N: connecting two containers face to face, e.g. comprising a filter] [N1204]
- B01L3/565 . . [N: Seals (in general F16L)] [N1204]
- B01L3/567 . . [N: Valves, taps or stop-cocks (in combination with burettes B01L3/02B; in general F16K)] [N1204]
- B01L3/569 . . [N: Glassware] [N1204]
- B01L5/00** **Gas handling apparatus (gas jars or cylinders B01L 3/12; cold traps, cold baffles B01D 8/00; separation of gases or vapours B01D 53/00; gas generators B01J 7/00; steam traps F16T) [C1008]**

- B01L5/02 . Gas collection apparatus, e.g. by bubbling under water (for sampling [G01N](#))
- B01L5/04 . Gas washing apparatus, e.g. by bubbling
- B01L7/00** **Heating or cooling apparatus (evaporators B01D 1/00; drying gases or vapours, e.g. desiccators, B01D 53/26; autoclaves B01J 3/04; drying ovens F26B; furnaces, ovens F27); Heat insulating devices [C1008]**
- B01L7/02 . Water baths; Sand baths; Air baths
- B01L7/04 . Heat insulating devices, e.g. jackets for flasks [\[N1008\]](#)
- B01L7/50 . [\[N: Cryostats\] \[N1204\]](#)
- B01L7/52 . [\[N: with provision for submitting samples to a predetermined sequence of different temperatures, e.g. for treating nucleic acid samples \(amplification or hybridisation processes per se C12Q1/68; controlling sequential reactions for synthesis B01J19/00B8\)\] \[N1204\]](#)
- B01L7/525 . . [\[N: with physical movement of samples between temperature zones\] \[N1204\]](#)
- B01L7/5255 . . . [\[N: by moving sample containers\] \[N1204\]](#)
- B01L7/54 . [\[N: using spatial temperature gradients\] \[N1204\]](#)
- B01L9/00** **Supporting devices; Holding devices (tweezers, tongs [B25B](#))**
- B01L9/02 . Laboratory benches or tables; Fittings therefor
- B01L9/04 . Retort stands; Retort clamps
- B01L9/06 . Test-tube stands; Test-tube holders
- B01L9/06C . . [\[N: specially adapted for capillary tubes\] \[N1204\]](#)
- B01L9/50 . [\[N: Clamping means, tongs \(in general F16B2/06\)\] \[N1204\]](#)
- B01L9/52 . [\[N: Supports for flat sample carrier, e.g. used for plates, slides, chips\] \[N1204\]](#)
- B01L9/523 . . [\[N: for multisample carriers, e.g. used for microtitration plates\] \[N1204\]](#)
- B01L9/527 . . [\[N: for microfluidic devices, e.g. used for lab-on-a-chip\] \[N1204\]](#)
- B01L9/54 . [\[N: Supports related to pipettes and burettes\] \[N1204\]](#)
- B01L9/543 . . [\[N: for disposable pipette tips, e.g. racks or cassettes\] \[N1204\]](#)
- B01L9/547 . . [\[N: for dispensing pins\] \[N1204\]](#)
- B01L99/00** **Subject matter not provided for in other groups of this subclass [\[N: \(chemical indicators in general G01N\)\] \[N1008\]](#)**