

ECLA EUROPEAN CLASSIFICATION

- B67C CLEANING, FILLING WITH LIQUIDS OR SEMILIQUIDS, OR EMPTYING, OF BOTTLES, JARS, CANS, CASKS, BARRELS, OR SIMILAR CONTAINERS, NOT OTHERWISE PROVIDED FOR; FUNNELS**
- B67C3/00 Bottling liquids or semiliquids; Filling jars or cans with liquids or semiliquids using bottling or like apparatus; Filling casks or barrels with liquids or semiliquids (filling containers with liquids or semiliquids using apparatus other than bottling or like apparatus B65B3/00) [C1003]**
- B67C3/00C . [N: Cleaning of filling devices]
 - B67C3/00C2 . . [N: using cups or dummies to be placed under the filling heads] [N9912]
 - B67C3/00C2B . . . [N: permanently attached to the filling machine and movable between a rest and a working position] [N9912]
 - B67C3/00C4 . . [N: Cleaning outside parts of filling devices] [N9912]
 - B67C3/00D . [N: Applications of control, warning or safety devices in filling machinery (flow-control B67C3/28)] [N0203]
 - B67C3/00F . [N: Bottling or like apparatus specially adapted to be transported, e.g. positioned on a truck or in a container] [N1203]
 - B67C3/02 . Bottling liquids or semiliquids; Filling jars or cans with liquids or semiliquids using bottling or like apparatus
 - B67C3/02B . . [N: Filling multiple liquids in a container (B67C3/20F takes precedence)] [N1203]
 - B67C3/02B2 . . . [N: Filling the liquids simultaneously] [N1203]
 - B67C3/04 . . without applying pressure
 - B67C3/04A . . . [N: Apparatus specially adapted for filling bottles with hot liquids] [N0804]
 - B67C3/06 . . using counterpressure, i.e. filling while the container is under pressure
 - B67C3/06B . . . [N: Filling siphons, e.g. carbonating beverages during filling (siphons B67D1/04D)]
 - B67C3/08 . . . and subsequently lowering the counterpressure
 - B67C3/10 . . . preliminary filling with inert gases, e.g. carbon dioxide
 - B67C3/12 . . . Pressure-control devices
 - B67C3/14 . . . specially adapted for filling with hot liquids [C1003]
 - B67C3/16 . . using suction
 - B67C3/18 . . using siphoning arrangements
 - B67C3/20 . . with provision for metering the liquids to be introduced, e.g. when adding syrups (measuring volume, or volume flow, in general G01F)
 - B67C3/20B . . . [N: by weighing] [N9507]
 - B67C3/20D . . . [N: using dosing chambers] [N9507]
 - B67C3/20E . . . [N: using arrangements of cylinders and pistons (B67C3/20F takes precedence)] [N9507]
 - B67C3/20F . . . [N: specially adapted for adding small amounts of additional liquids, e.g. syrup]

			N9507]
B67C3/22	. .	Details	
B67C3/22B	. . .	[N: Head-space air removing devices, e.g. by inducing foam]	
B67C3/22B2	. . . .	[N: by squeezing the container elastically] [N0104]	
B67C3/22E	. . .	[N: Means for filling simultaneously, e.g. in a rotary filling apparatus or multiple rows of containers] [N1203]	
B67C3/24	. . .	Devices for supporting or handling bottles (transport or storing devices in general B65G)	
B67C3/24B	. . . .	[N: engaging with bottle necks (B67C3/26 takes precedence)]	
B67C3/24D	. . . .	[N: Bottle lifting devices actuated by jacks, e.g. hydraulic, pneumatic (B67C3/24B takes precedence)]	
B67C3/24E	. . . .	[N: Bottle lifting devices actuated by cams (B67C3/24B takes precedence)]	
B67C3/24G	. . . .	[N: Bottle lifting devices actuated by threads B67C3/24B takes precedence] [N0406]	
B67C3/26	. . .	Filling-heads; Means for engaging filling-heads with bottle necks	
B67C3/26B	. . . .	[N: comprising anti-dripping means]	
B67C3/26B2	. . . . .	[N: to prevent dripping from sources other than the filling product, e.g. deflectors for vapours condensed on the outer surface of the filling device][N0403]	
B67C3/26C	. . . .	[N: specially adapted for counter-pressure filling]	
B67C3/26C2	. . . . .	[N: the liquid valve being opened by mechanical or electrical actuation]	
B67C3/26C2B	. . . . .	[N: and the filling operation stopping when the liquid rises to a level at which it closes a vent opening]	
B67C3/26C2D	. . . . .	[N: and the filling operation stopping when probes, e.g. electrical or optical probes, sense the wanted liquid level (level control in general G01F)]	
B67C3/26C4	. . . . .	[N: the liquid valve being opened automatically when a given counter-pressure is obtained in the container to be filled]	
B67C3/26C4B	. . . . .	[N: and the filling operation stopping when the liquid rises to a level at which it closes a vent opening]	
B67C3/26C4D	. . . . .	[N: and the filling operation stopping when probes, e.g. electrical or optical probes, sense the wanted liquid level (level control in general G01F)]	
B67C3/26D	. . . .	[N: specially adapted for vacuum or suction filling]	
B67C3/26E	. . . .	[N: comprising a liquid valve opened by relative movement between the container and the filling head]	
B67C3/26E2	. . . . .	[N: and the filling operation being carried out manually]	
B67C3/26F	. . . .	[N: specially adapted for sterilising prior to filling] [N9411]	
B67C3/28	. . .	Flow-control devices, e.g. using valves ([N: B67C3/26C2 , B67C3/26C4 , B67C3/26E take precedence]; valves in general F16K)	
B67C3/28B	. . . .	[N: Profiled valve bodies for smoothing the flow at the outlet of the filling nozzle] [N9810]	
B67C3/28D	. . . .	[N: related to filling level control (B67C3/26C2 , B67C3/26C4 take precedence)] [N0812]	
B67C3/28D2	. . . . .	[N: using pressure sensing means] [N0812]	
B67C3/28D4	. . . . .	[N: using non-liquid contact sensing means (B67C3/28D2 takes precedence)] [N0812]	
B67C3/28D6	. . . . .	[N: using liquid contact sensing means (B67C3/28D2 takes precedence)]	

- [N0812]
- B67C3/28E [N: related to flow rate control, i.e. controlling slow and fast filling phases] [N0812]
 - B67C3/28F [N: related to flow control using predetermined or real-time calculated parameters] [N0812]
 - B67C3/28F2 [N: using master-slave controls] [N0812]
 - B67C3/30 . Filling of barrels or casks
 - B67C3/32 . . using counterpressure, i.e. filling while the container is under pressure
 - B67C3/34 . . Devices for engaging filling-heads with filling-apertures

B67C7/00 **Concurrent cleaning, filling, and closing of bottles; Processes or devices for at least two of these operations**

- B67C7/00B . [N: Conveying; Synchronising] [C9411]
- B67C7/00B2 . . [N: Synchronising] [N0203]
- B67C7/00B4 . . [N: General lay-out of bottle-handling machines] [N0203]
- B67C7/00B6 . . [N: the containers travelling along a linear path] [N0203]
- B67C7/00B6B . . . [N: the operation being performed batch-wise] [N0203]
- B67C7/00B8 . . [N: the containers travelling along a circular path] [N0203]
- B67C7/00B8B . . . [N: Infeed and outfeed devices] [N0203]
- B67C7/00B8B2 [N: using grippers (for supporting bottle necks during filling [B67C3/24B](#))] [N0203]
- B67C7/00C . [N: Sterilising, aseptic filling and closing ([B67C3/26F](#) takes precedence)] [N9411]
- B67C7/00C2 . . [N: comprising a cleaning step between two closing steps] [N0101]
- B67C7/00C4 . . [N: Sterilisation being restricted to the area of application of the closure] [N0104]
- B67C7/00D . [N: Lever action devices operated by hand or foot] [N9908]

B67C9/00 **Devices for emptying bottles, not otherwise provided for** [N: during preparation of alcoholic beverages except beer [C12G1/00](#)]

B67C11/00 **Funnels, e.g. for liquids** (filter funnels [B01D23/28](#); volume flow-meters [G01F](#))

- B67C11/02 . without discharge valves
- B67C11/04 . with non-automatic discharge valves
- B67C11/06 . with automatic discharge valves
- B67C11/06B . . [N: for preventing spilling or dripping] [N1110]
- B67C11/06D . . [N: for preventing overflow of the filled container] [N1110]