

Anaerobic Cultivation

Product Information 2018 (Excerpt)



Hungate Anaerobic Culture Tubes with Screw Thread

- Tubes from Borosilicate glass for anaerobic culture conditions
- The technique developed by Hungate et al. is ideal for cultivation of anaerobic microorganism with sample harvesting and feeding by piercing the butyl rubber stopper with a needle
- Hungate tubes complete consist of following items:
 - a) Screw cap with a 9 mm opening
 - b) Flange style stopper made from grey butyl rubber, 5.4 mm height
 - c) 16 x 125 mm screw thread style tube designed to maintain anaerobic conditions

Lit.: "Use of Syringe Methods for anaerobics"; J.M. Macy, J.E. Snellen and R.E. Hungate. J. Clin. Nutrition, Dec. 1972.

Cat. No.	Description	Dimensions	Cs.
CLS-4208-01	Hungate Tubes complete, incl. butyl rubber stoppers and screw caps	16 x 125 mm	100

Replacement components

CLS-4208-10	Hungate glass tubes	16 x 125 mm	100
CLS-4208-11	Open top screw caps	Opening: 9 mm	100
CLS-4208-12	Butyl rubber stoppers	Height: 5,4	100



Balch Anaerobic Culture Tubes with Aluminum Seal

- Tubes from Borosilicate glass for anaerobic culture conditions
- Especially suited for gas producing bacteria, for over-pressure between 2 - 3 bar
- Culture tubes complete consist of the following autoclavable parts:
 - a) 20 mm aluminum crimp seal with 9 mm opening, for safe and gas-tight closing
 - b) Gas-tight flange style stopper made from blue butyl rubber, 14 mm height
 - c) 18 x 150 mm crimp style tube designed to maintain anaerobic conditions
- Crimper and Decapper for aluminum seals (please see overleaf)

Cat. No.	Description	Dimensions	Cs.
CLS-4209-01	Anaerobic tubes complete, incl. butyl stoppers and aluminum seals	18 x 150 mm	100

Replacement components

CLS-4209-10	Glass tubes	18 x 150 mm	100
CLS-4209-12	Aluminum seals with 9 mm opening	Ø: 20 mm	100
CLS-4209-14	Butyl rubber stoppers	Höhe: 14 mm	100

Anaerobic Bottles with Aluminium seals



- Bottles for anaerobic culture conditions (without rubber stopper and seal)
- Gas tight blue butyl rubber stoppers as for Balch tubes (CLS-4209-01)
- Manufactured from Borosilicate glass

Cat. No.	Description	Cs.
CLS-4215-03	Anaerobic culture bottle, 500 ml, single neck	1
CLS-4215-05	Anaerobic culture bottle, 1000 ml, single neck	1
CLS-4215-01	Anaerobic culture bottle, 2000 ml, two necks	1

Replacement components

CLS-4209-12	Aluminum seals, 20 mm diameter, with 9 mm opening	100
CLS-4209-14	Butyl rubber stoppers, 20 mm diameter, 14 mm height	100

Anaerobic Bottles with Aluminium seals



- Bottles for anaerobic media storage (with rubber stopper and seal)
- Gas tight blue butyl rubber stoppers as for Balch tubes (CLS-4209-01)
- Manufactured from Duran® Schott Borosilicate glass, with graduation and marking area

Cat. No.	Description	Cs.
CLS-4217-01	Anaerobic media bottle, 50 ml	1
CLS-4217-02	Anaerobic media bottle, 100 ml	1
CLS-4217-03	Anaerobic media bottle, 250 ml	1
CLS-4217-04	Anaerobic media bottle, 500 ml	1
CLS-4217-05	Anaerobic media bottle, 1000 ml	1

Replacement components

CLS-4209-12	Aluminum seals, 20 mm diameter, with 9 mm opening	100
CLS-4209-14	Butyl rubber stoppers, 20 mm diameter, 14 mm height	100

Crimper and Decapper for Anaerobic Culture Tubes and Bottles



- Hand operated
- For 20 mm aluminum seals (CLS-4209-12)

Cat. No.	Description	Cs.
CG-4930-20	Crimper for 20 mm aluminum seals	1
CG-4930-21	Decapper (Pliers-Type)	1
CV-5706-0020	Decapper for 20 mm aluminum seals (Crimp-Type)	1