

**Microbiology**  
**Merckotube® TBG broth, modified 1.18430.0025**

- Glass tube
- 10 ml filling volume
- Screw cap
- 25 tubes per pack

**TBG-broth (Tetrathionate-Brilliant-green Bile Enrichment Broth), modified**

Selective enrichment of Salmonella for the examination of pharmaceutical products in raw materials as well as foodstuffs, meat etc.

The broth complies with the recommendations of the European Pharmacopeia 5<sup>th</sup> edition.

Note: for granting good functioning of the TBG-Broth, the preparation and the incubation temperature had to be modified versus the recommendations of the European Pharmacopeia 5<sup>th</sup> edition.

**Mode of Action**

Bile supports the growth of enteric bacteria and inhibits bacteria, which do not normally live in the intestine. Brilliant-green specifically inhibits the Gram-positive accompanying flora. For suppressing Proteus, the pH of the medium can be adjusted to approx. 6.5. JEFFRIES (1959) reported that it is advantageous to add 0.04 g/litre novobiocin for suppressing Proteus.

**Typical composition (g/l)**

Peptone 8.6; ox-bile 8.0; sodium chloride 6.4; calcium carbonate 20.0; potassium tetrathionate 20.0; brilliant green 0.07.

The appearance of the medium is turbid green with sediment.

**Experimental Procedure and Evaluation**

Sample to be enriched in Lactose-Broth.

From the pre-enrichment inoculate an appropriate amount into TBG-Broth and incubate for 18-24 h at 35-37 °C. Streak onto appropriate Salmonella media. Brown cultures to be examined further.

**Shelf life in month**

6 month

**Storage**

+2°C to +8°C

**Ordering information**

Product	Merck Cat.No.	Pack size
Merckotube® TBG broth, modified	1.18430.0025	25 tubes (25 x 10 ml)

**Quality control**

Inoculum	Spec. Values
Salmonella typhimurium ATCC 14028	≤100
Escherichia coli ATCC 25922	≥1 · 10 <sup>4</sup>
<b>Enrichment from a mixed inoculum after 24h</b>	
Salmonella typhimurium ATCC 14028	≥95 %
Escherichia coli ATCC 25922	≤ 5 %
<b>Growth</b>	
Salmonella typhimurium ATCC 14028	+
Escherichia coli ATCC 25922	inhibited
<b>Inoculum (Salmonella abony NCTC 6017)</b>	<b>Inoculum</b> ≤100
<b>Test according to Ph.Eur</b>	
Salmonella abony NCTC 6017	+
Salmonella typhimurium ATCC 14028	+
<b>Sterility test</b>	<b>Growth</b>
2 weeks at 20 to 25°C	no growth
2 weeks at 30 to 35°C	no growth

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