Mast Group Ltd.
Mast House, Derby Road,
Bootle, Merseyside, L20 1EA
United Kingdom
Tel: + 44 (0) 151 472 1444
Fax: + 44 (0) 151 944 1332
email: sales@mast-group.com
Web: www.mast-group.com

Mast Diagnostica GmbH
Feldstrasse 20
DE-23858 Reinfeld
Germany
Tel: + 49 (0) 4533 2007 0
Fax: + 49 (0) 4533 2007 68
email: mast@mast-diagnostica.de
Web: www.mast-group.com

Mast Diagnostic
12 rue Jean-Jacques Mention
CS91106, 80011 Amiens, CEDEX 1
France
Tél: + 33 (0) 3 22 80 80 67
Fax: + 33 (0) 3 22 80 99 22
email: info@mast-diagnostic.fr
Web: www.mast-group.com

Brilliant Green Bile (2%) Broth

DM259

Intended Use
A selective medium for the detection or confirmation of coliform bacteria in dairy products, food and water.

Contents
See pack label.

Formulation*

Material:	Concentration in medium:
Peptone	10.0 g/litre
Lactose	10.0 g/litre
Ox Bile	20.0 g/litre
Brilliant green	0.0133 g/litre
Final pH: 7.4 ± 0.2	

Storage and shelf life
All dehydrated culture media containers should be kept tightly closed and stored in a dry place at 10 to 25°C until the expiry date shown on the pack label.

Precautions
For *in vitro* diagnostic use only. Observe approved hazard precautions and aseptic techniques. To be used only by adequately trained and qualified laboratory personnel. Sterilise all biohazard waste before disposal. Refer to Product Safety Data sheet (available on request or via MAST® website).

Materials required but not provided
Standard microbiological supplies and equipment such as loops, MAST® selective supplements, swabs, applicator sticks, incinerators and incubators, etc., as well as serological and biochemical reagents and additives such as blood.

Procedure
1. Refer to pack label for quantities and volumes required – medium can be prepared at single or double strength according to methodology used. Prepare MAST® Brilliant Green Bile (2%) Broth (DM259D) by suspending the powder in distilled or deionised water. For sachet packs, dissolve the entire contents of the sachet in the volume shown on the label.
2. Mix well and warm to dissolve.
3. Distribute into test tubes or suitable bottles containing inverted Durham's tubes.
4. Autoclave at 121°C (15 p.s.i.) for 15 minutes. Double strength medium must not be autoclaved. Sterilise by steaming at 100°C for 30 minutes.
5. Prepared medium may be used immediately or stored at 2 to 8°C for up to one week before use.
6. Inoculate by adding water sample to prepared MAST® Brilliant Green Bile (2%) Broth (DM259D) in the proportion of 1ml or less per 10ml of prepared medium.
7. Food samples should be homogenised, decimally diluted in a suitable diluent and added to prepared broth in the proportion of 1:10.
8. To test larger sample volumes (10ml or greater) of food or water samples, double strength broth is used in an equal volume to the sample.
9. Incubate aerobically at 43 to 45°C for 48 hours to detect *E.coli*; at 32°C for 24 to 48 hours for mesotrophic coliforms or at 4°C for 10 days to detect psychrotrophic coliforms. Alternative temperatures can be used according to the methodology followed.

Interpretation of results
Presumptive evidence of coliform organisms is indicated by copious amounts of gas formation (formation of a bubble inside the Durham's tube) and turbidity in the medium. If *E.coli* is suspected after incubation at 44°C, it can be confirmed by the indole production test at 44°C using MAST® Tryptone Water (DM227D).

Quality control
Check for signs of deterioration. Quality control must be performed with at least one organism to demonstrate expected performance. Do not use the product if the result with the control organism is incorrect. The list below illustrates a range of performance control strains which the end user can easily obtain.

Test Organisms	Result
Escherichia coli ATCC® 25922	Growth, turbidity, gas
Staphylococcus aureus ATCC® 25923	No growth

References
Bibliography available on request.

IFU369 GB 08/20 V5

*Formulation may change to meet performance criteria