

**TECHNICAL SHEET**

<b>DP004</b>	<b>Dual Performance Selective Medium – HEA (for adult use)</b>		
<b>Formula</b>			
<b>Ingredients:</b>	<b>gms/lit</b>		
Proteose peptone	12.00		
Yeast extract	3.00		
Lactose	12.00		
Sucrose	12.00		
Salicin	2.00		
Bile salt mixture	9.00		
Sodium chloride	5.00		
Sodium thiosulphate	5.00		
Ferric ammonium citrate	1.50		
Acid fuchsin	0.10		
Bromo thymol blue	0.065		
Agar	15.00		
Solid Phase	20ml		
Liquid Phase	40ml		
Final pH (at 25°C): 7.5 ± 0.2			
<b>Directions:</b>			
<b>Recommended volume of blood to be tested in (DP004)-8-10ml</b>			
Label the ready to use Dual performance medium bottle. Remove the top seal of the cap. Disinfect the part of the rubber stopper which is now exposed. Transfer the sample immediately into the culture bottle by puncturing the rubber stopper with the needle. Venting: Use sterile venting needle. Keep the bottle in an upright position preferably in a biological safety cabinet, place an alcohol swab over the rubber stopper and insert the venting needle with filter through it. Insertion and withdrawal of the needle should be done in a straight line. Discard the needle and mix the contents by gently inverting the bottle 2-3 times. Do not vent the bottle for anaerobic cultures. Incubate at 35-37°C for 18-24 hours.			
<b>Principle:</b>			
Proteose Peptone is a source of nitrogen and other nutrients in Hektoen Enteric Agar. Bile Salts and the dyes, bromo thymol blue and acid fuchsin, inhibit gram – positive organisms. Lactose, sucrose and salicin are sources of fermentable carbohydrates. Ferric ammonium citrate, a source of iron, allows production of hydrogen sulfide (H <sub>2</sub> S) from sodium thiosulfate. H <sub>2</sub> S – positive colonies have black centers. Yeast Extract provides vitamins and cofactors required for growth and additional nitrogen and carbon. Agar is used as a solidifying agent.			
<b>(I) QC Tests</b>			
pH:	7.5 ± 0.2		
Color:	Colour of agar medium- Green coloured medium Colour of liquid medium- Green coloured medium		
Appearance:	Combination of solid and liquid media in single bottle.		
<b>(II) Sterility test</b>	Passes release criteria		
<b>(III) Q.C. Test Microbiological</b>			
Cultural characteristics observed after incubation at 35-37°C for 18-24 hours.			
MICROORGANISM (ATCC)	GROWTH ON AGAR MEDIUM	GROWTH IN LIQUID MEDIUM	COLOR OF COLONY
Escherichia coli 25922	Fair	Luxuriant	Orange may have bile ppt.
# Klebsiella aerogenes 13048 (00175*)	fair-good	Luxuriant	Salmon orange
S. Enteritidis 13076	luxuriant	luxuriant	greenish blue may have black centres (H <sub>2</sub> S production)

**TECHNICAL SHEET**

S. serotype typhi 6539	luxuriant	luxuriant	greenish blue may have black centres(H <sub>2</sub> S production)
Shigella flexneri 12022	luxuriant	luxuriant	Greenish blue
Salmonella Typhimurium 14028 (00031*)	luxuriant	luxuriant	greenish blue may have black centres (H <sub>2</sub> S production)
Enterococcus faecalis 29212 (00087*)	Inhibition	Inhibition	-
Escherichia coli 8739 (00012*)	Fair	Luxuriant	Orange may have bile ppt.

Refer disclaimer Overleaf

<b>Precautions :</b>	1. In Vitro diagnostic use only.
	2. Read the label before opening the container
<b>Limitations :</b>	1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.
<b>Use:</b>	For differential and selective isolation of Salmonella and Shigella species from enteric pathological specimens.
<b>Storage:</b>	Store between 2-8°C. Use before expiry date on the label.
<b>Packing:</b>	7ml of agar medium and 20ml of broth medium in 10 glass bottles

**Disclaimer:**

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related BIOMARKLABORATORIES publications.

The information contained in this publication is based on our in-house studies and market performance and is to the best of our knowledge true and accurate. BIOMARK LABORATORIES reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.