

Dipslides for industrial and Environmental Monitoring of Bacteria and Fungi

Inoculation (Surfaces)

- Remove cap and withdraw combined cap/tongue unit from outer tubing. Do not touch culture gel.
- Holding the slide by the tabs at each end, press one side of the agar against the surface under test. The ribbed portion of the dipslide, above the agar, will bend to allow full contact.
- Repeat with the second side on an area close to the first site.
- Replace the slide in the outer tube, push to seal firmly, label as required and incubate.

Inoculation (Fluids)

Method 1:

- Remove cap and withdraw combined cap/tongue unit from outer tubing.
- Do not touch culture gel.
- Dip the tongue in the desired fluid sample until agar is fully submerged. Wait for approx. ten seconds before removing from sample.
- Remove slide from sample and allow excess fluid to drain for a few seconds. Replace in tube, push to seal firmly, label as required and incubate.

Method 2:

- Remove cap and withdraw combined cap/tongue unit from outer tubing.
- Do not touch culture gel.
- Hold slide under running liquid/spray sample so that both sides are covered.
- Allow excess fluid to drain for a few seconds. Replace in tube, push to seal firmly, label as required and incubate.

Incubation

Incubate upright as detailed for each product using table 1. below **OR** at the temperature required for growth of target organisms. Where guidelines are laid down (eg. HSE) these should be followed.

TABLE 1: DIPSLIDE INCUBATION REQUIREMENTS					
Product Code	Temp	Period (hrs)	Product Code	Temp	Period (hrs)
BT2/BT3/BT2N	35°C	24-48	BV/BVN	35°C	24-48
BTM2/BTM3	30°C	24-120	SCM	35°C	24-48
PC2/PCN	35°C	24-48	BP	35°C	24-48
PCV	35°C	24-48	BPP	35°C	24-48
PO	22°C	24-120	LIST	35°C	24-48
SC2/SCN	35°C	24-48	PM	35°C	24-48
TV	35°C	24-48	TP	35°C	24-48
BRB2	30°C	24-120	TT2/TT3	35°C	24-48
PC2T/PC2TN	35°C	24-48	TTS/TTS3	35°C	24-48
E	35°C	24-48	YF	30°C	24-120
PCTV	35°C	24-48	RBS	30°C	24-120
SCT/SCNT	35°C	24-48	TSA	35°C	24-48
TVLN/TTV	35°C	24-48	PCT/RB	30°C	24-120
TF3	30°C	24-120			

Interpretation

Use tables 2. & 3. for interpretation of growth characteristics. Please note the data outlined in these tables are according to ATCC control strains and act as a guide only. There can be variations in growth characteristics among many different organisms. For presumptive analysis only, confirmation of target organisms via laboratory methods is advised.

For quantitative analysis compare the incubated slide to the charts provided, reading the result from the closest matching picture. It is good practice to compare all growth against a negative control (unused slide) to demonstrate high levels of infection that can appear subtle due to an even 'lawn-like' appearance across the whole slide surface.

- Fluids are calibrated in "Colony forming units" (CFU) per millilitre.
 - Surface results are in CFU per square centimetre.

TABLE 2: RESULT INTERPRETATION (GENERIC DIPSLIDES)

Product Code	Agar side 1			Agar side 2		
	Agar colour	Detection	Growth characteristics	Agar colour	Detection	Growth characteristics
BT2/BT3/BT2N	Straw	Total Count	Red/varied colonies	Straw	Total Count	Red/varied colonies
BTM2/BTM3	Straw	Total Count	Red/varied colonies	Brown	Yeasts & Moulds	Variation in colonies
PC2/PCN	Straw	Total Count	Variation in colonies	Straw	Total Count	Variation in colonies
PCV	Straw	Total Count	Variation in colonies	Purple	Enterobacteriaceae	Purple-pink colonies
PO	Straw	Total Count	Variation in colonies	Straw	Yeasts & Moulds	Variation in colonies
SC2/SCN	Straw	Total Count	Variation in colonies	Red	Coliforms	Red/Straw colonies
TV	Straw	Total Count	Variation in colonies	Purple	Enterobacteriaceae	Purple-pink colonies
BRB2	Pink	Yeasts & Moulds	Variation in colonies	Bright pink	Yeasts & Moulds	Variation in colonies
PC2T/PC2TN	Straw	Total Count	Red/varied colonies	Straw	Total Count	Red/varied colonies
E	Purple	Enterobacteriaceae	Purple-pink colonies	Purple	Enterobacteriaceae	Purple-pink colonies
PCTV	Straw	Total Count	Red/varied colonies	Purple	Enterobacteriaceae	Purple-pink colonies
SCT/SCNT	Straw	Total Count	Red/varied colonies	Red	Coliforms	Red/Straw colonies
TVLN/TTV	Straw	Total Count	Red/varied colonies	Purple	Enterobacteriaceae	Purple-pink colonies
TF3	Straw	Total Count	Red/varied colonies	Red	Yeasts & Moulds	Variation in colonies
YF	Brown	Yeasts & Moulds	Variation in colonies	Brown	Yeasts & Moulds	Variation in colonies
RBS	Straw	Total Count	Red/varied colonies	Bright pink	Yeasts & Moulds	Variation in colonies
TSA	Straw	Total Count	Variation in colonies	Straw	Total Count	Variation in colonies
PCT/RB	Straw	Total Count	Red/varied colonies	Bright pink	Yeasts & Moulds	Variation in colonies

Please note: The results outlined in this table are according to ATCC control strains and act as a guide only. There can be variations in growth characteristics among many different organisms. For presumptive analysis only, confirmation of target organisms via laboratory methods is advised.

TABLE 3. RESULT INTERPRETATION (SELECTIVE DIPSLIDES)

Code	Agar side 1			Agar side 2		
	Agar colour	Detection	Growth characteristics	Agar colour	Detection	Growth characteristics
BV/BVN	Straw	<i>Staphylococcus aureus</i>	Black/grey colonies with clear zone in agar surrounding**	Purple	Enterobacteriaceae	Purple-pink colonies
SCM	Straw	Total Count	Variation in colonies	Red	Coliforms/ <i>E.coli</i>	Red/Straw colonies*
BP	Straw	<i>Staphylococcus aureus</i>	Black/grey colonies with clear zone in agar surrounding**	Straw	<i>Staphylococcus aureus</i>	Black/grey colonies with clear zone surrounding colony**
BPP	Straw	<i>Staphylococcus aureus</i>	Black/grey colonies with clear zone in agar surrounding**	Straw	Total Count	Variation in colonies
LIST	Yellow	<i>Listeria monocytogenes</i> .	Brown colonies with zone of black agar surrounding****	Yellow	<i>Listeria monocytogenes</i> .	Brown colonies with zone of black agar surrounding****
PM	Straw	<i>Pseudomonas spp.</i>	Greenish-blue or Brown***	Red	Coliforms	Red/Straw colonies
TP	Straw	Total Count	Variation in colonies	White	<i>Pseudomonas spp.</i>	Greenish-blue or Brown***
TT2/TT3	Green	Urinary	Yellow/blueish colonies	Red	Urinary	Red/Straw colonies
TTS/TT3	Green	Urinary	Yellow/blueish colonies	Red	Urinary	Red/Straw colonies

* *E.coli* colonies fluoresce pink under UV light.
 ** *E. coli*, *Micrococcus spp.*, *Bacillus spp.* and *Proteus spp.* can mimic appearance of *Staphylococcus aureus*. These will not have a clear halo surrounding the colony and will appear matt in texture.

*** colour dependant on microbiological strain.

**** *Enterococcus spp.* can mimic the appearance of *Listeria monocytogenes* after prolonged incubation.

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Comparison Charts Bacteria/Yeasts

Fluids
CFU/ml

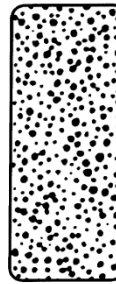
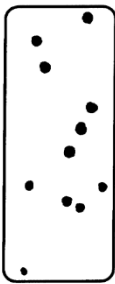
10³

10⁴

10⁵

10⁶

10⁷



Surfaces
CFU/cm²

2.5

12

40

100

250

Very Slight Growth

Slight growth

Moderate growth

Heavy growth

Very heavy growth

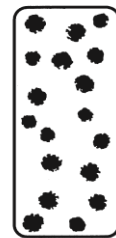
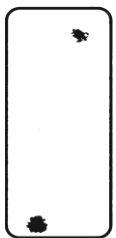
Comparison Chart Mould

Fluids

10²

10³

10⁴



Surfaces

0.4

1.6

4.0

Slight

Moderate

Heavy

Storage

Store in a cool dry place at an optimum of 8-15°C. Use before the expiry date on the box. Rapid fluctuations in temperature can lead to condensation forming in the bottom of the tube and potential dehydration of agar. This does not affect dipslide performance, provided the agar still fills the tray.

Always inspect slides before use. Do not use slides if there is any sign of growth before opening as this could lead to contamination of your test sample.

Disposal

Used/contaminated slides should be incinerated, autoclaved or soaked in disinfectant for a minimum of 24 hours before disposal.