

## Media Type - Tryptone Soya Agar (TSA) plus Neutralisers

**Organisms & morphology:** Tryptone Soya Agar (TSA) plus Neutralisers will support growth of a wide range of aerobic and anaerobic bacteria if incubated under the right conditions. A typical set of control organisms and the phenotypic identification associated with these are:

Organism	Morphology			Gram		Biochemical test	
	Edge	Shape	Colour	Gram	Shape	Catalase	Oxidase
Staphylococcus aureus	Smooth	Regular	Yellow / Cream	Positive	Cocci	Positive	Negative
Staphylococcus epidermidis	Smooth	Regular	Yellow / Cream	Positive	Cocci	Positive	Negative
Escherichia coli	Smooth	Regular	Cream	Negative	Rods	Positive	Negative
Bacillus subtilis	Irregular	Irregular	Cream	Positive	Rods	Positive	Variable
Pseudomonas aeruginosa	Smooth	Regular	Cream	Negative	Rods	Positive	Positive

## Media Type - Tryptone Soya Agar (TSA) plus Neutralisers

**Organisms & morphology:** Tryptone Soya Agar (TSA) plus Neutralisers will support growth of a wide range of aerobic and anaerobic bacteria if incubated under the right conditions. A typical set of control organisms and the phenotypic identification associated with these are:

	Morphology		
Fungal	Edge	Shape	Colour
Candida albicans	Smooth	Regular	Cream
Aspergillus brasiliensis	Irregular	Irregular	White to black

# Media Type - Tryptone Soya Agar (TSA) plus Neutralisers

**Regulatory references:** TSA is a Harmonised Pharmacopoeia medium and as such is mentioned in the BP/EP/JP, as well as the US Pharmacopoeia.

EP Chapter Ref 2.6.12 Microbial examination of non-sterile products: Microbial enumeration tests			
Recommended Culture Media	Property	Micro-organisms	Incubation Time & Temp
Casein Soyabean Digest Agar	Growth promotion	Bacillus subtilis Pseudomonas aeruginosa Staphylococcus aureus	30-35°C for < 3 days
	Growth promotion	Candida albicans Aspergillus brasiliensis	30-35°C for < 5 days

# Media Type - Tryptone Soya Agar (TSA) plus Neutralisers

**Regulatory references:** TSA is a Harmonised Pharmacopoeia medium and as such is mentioned in the BP/EP/JP, as well as the US Pharmacopoeia.

**EP Chapter Ref 2.6.12 Microbial examination of non-sterile products: Microbial enumeration tests**  
**Table 2.6.12.-2. – Common neutralising agents for interfering substances**

Interfering substances	Potential neutralising method
Gluteraldehyde, Mercurials	Sodium hydrogen sulphite (Sodium bisulphite)
Phenolics, alcohol, aldehydes, sorbate	Dilution
Aldehydes	Glycine
Quaternary Ammonium Compounds (QAC's), parahydroxybenzoates (parabens), bis-biguanides	Lecithin
QAC's, iodine, parabens	Polysorbate (Tween)
Mercurials	Thioglycollate
Mercurials, halogens, aldehydes	Thiosulphate
EDTA	Mg <sup>2+</sup> or Ca <sup>2+</sup> ions

7 & 8 Launton Business Centre, Murdock Road, Bicester, OX26 4XB, United Kingdom

T. +44 (0)1869 355500 E. [sales@cherwell-labs.co.uk](mailto:sales@cherwell-labs.co.uk)

[www.cherwell-labs.co.uk](http://www.cherwell-labs.co.uk)

