



# **Tryptic Soy Agar - Instructions for Use**

#### Intended Use

BAC $Gro^{TM}$  Tryptic Soy Agar (TSA), when prepared as directed, is intended for laboratory use as a general purpose, non-selective growth media for a wide variety of microorganisms. It is not intended for use in diagnosis, treatment, or prevention of disease in humans. BAC $Gro^{TM}$  TSA conforms to harmonized USP/EP/JP requirements<sup>1,2,3</sup>.

## **Product Summary**

Tryptic Soy Agar – referred to as Soybean-Casein Digest Agar Medium by the United States Pharmacopeia – is a general purpose, non-selective growth media that supports growth of most non-fastidious Gram-negative and Gram-positive bacteria as well as many yeasts and molds. It also supports the growth of many obligate anaerobes when incubated anaerobically. Enzymatic digests of casein and soybean meal provide a source of nitrogen. Osmotic balance is achieved through the inclusion of sodium chloride, while agar serves as a gelling agent.

The formulation of BAC $Gro^{TM}$  TSA conforms to the Harmonized United States Pharmacopeia (USP)<sup>1</sup>, European Pharmacopeia (EP)<sup>2</sup> and Japanese Pharmacopeia (JP)<sup>3</sup> Standards.

## Formulation\* (per Liter)

Casein Peptone	15.0 g
Soy Peptone	5.0 g
Sodium Chloride	5.0 g
Agar	15.0 g
Total	40.0 g/L

<sup>\*</sup>Formula may be supplemented and/or adjusted as required to meet performance criteria

### **Directions**

- 1. Add 40g of TSA powder to 1L of deionized water.
- 2. Stir while heating. Bring to a soft boil to completely dissolve.
- 3. Autoclave at 121°C for 15 minutes.

#### **Precautions**

This product is for laboratory use only and should only be used by qualified, trained laboratory personnel. Personnel should always use proper aseptic technique and observe all biohazardous precautions. All microbiological cultures should be presumed to be infectious.

Avoid ingestion, inhalation, or contact with skin and mucous membranes. If contact occurs, flush the area with clean water.

## **Quality Control Specifications**

Gold Standard Diagnostics tests each lot of manufactured BAC*Gro*<sup>TM</sup> culture media utilizing appropriate control organisms and specifications as documented on the Certificate of Analysis. End users should perform quality control testing in accordance with government regulatory requirements and accreditation guidelines. The following specifications are routinely used for testing:

Appearance (dehydrated): Light beige, homogenous, free flowing powder, free of debris Appearance (prepared): Translucent, slightly hazy, light amber, with no precipitate or debris pH (prepared): 7.1 - 7.5 at  $25^{\circ}$ C

Organism Performance:

Strain ID	Inoculum	Incubation			Result
		Time	Temp.	Environment	Result
E. coli (ATCC® 25922)	≤100 CFU	18 – 72 hr.	30 – 35° C	Aerobic	Growth
E. coli (ATCC® 8739)	≤100 CFU	18 – 72 hr.	30 – 35° C	Aerobic	Growth
S. enterica ser. Enteritidis (ATCC® 13076)	≤100 CFU	18 – 72 hr.	30 – 35° C	Aerobic	Growth
P. aeruginosa (ATCC® 9027)	≤100 CFU	18 – 72 hr.	30 – 35° C	Aerobic	Growth
S. aureus (ATCC® 6538)	≤100 CFU	18 – 72 hr.	30 – 35° C	Aerobic	Growth
S. aureus (ATCC® 25923)	≤100 CFU	18 – 72 hr.	30 – 35° C	Aerobic	Growth
B. subtilis (ATCC® 6633)	≤100 CFU	18 – 72 hr.	30 – 35° C	Aerobic	Growth
L. monocytogenes (ATCC® 13932)	≤100 CFU	18 – 72 hr.	30 – 35° C	Aerobic	Growth
B. cereus (ATCC® 11778)	≤100 CFU	18 – 72 hr.	30 – 35° C	Aerobic	Growth
C. albicans (ATCC® 10231)	≤100 CFU	<5 days	30 – 35° C	Aerobic	Growth
A. brasiliensis (ATCC® 16404)	≤100 CFU	<5 days	30 – 35° C	Aerobic	Growth

## Limitations of the Procedure

This product is not labeled for use as a medical device, and is not intended to diagnose, treat, or prevent disease.

Due to variation in nutritional requirements, some species or strains may be encountered that grow poorly in this medium.

Further biochemical or serological testing is required for the identification of organisms grown in this medium.

## Storage and Expiration

BAC $Gro^{TM}$  Tryptic Soy Agar should be stored at 2 – 30°C. Because of the hygroscopic nature of dehydrated culture media, it should be stored in a dry place and the lid should remain tightly sealed. Media should be discarded if it is not free flowing or shows discoloration.

The expiration date printed on the label is applicable to media stored as directed.

## **Catalog Numbers**

DCM1301 – Tryptic Soy Agar, 500g DCM1305 – Tryptic Soy Agar, 5kg DCM1310 – Tryptic Soy Agar, 10kg

<sup>&</sup>lt;sup>1</sup> United States Pharmacopeial Convention. *United States Pharmacopoeia and National Formulary (USP-NF)*.

<sup>&</sup>lt;sup>2</sup> Directorate for the Quality of Medicines and the Council of Europe. *The European Pharmacopoeia*.

<sup>&</sup>lt;sup>3</sup> Pharmaceuticals and Medical Devices Agency, Ministry of Health, Labor, and Welfare. *Japanese Pharmacopoeia*.