

Triple sugar iron Agar(TSIA)

Product Number: TSI-250g

Product details

Formula of culture medium (per liter); pH7.3 ± 0.1(25°C)

Component	Weight
Peptone	20.0g
Beef Extract	5.0g
Sodium Chloride	5.0g
Lactose	10.0g
Sucrose	10.0g
Dextrose	1.0g
Ferrous Sulfate	0.2g
Sodium Thiosulfate	0.2g
Phenol Red	0.025g
Agar	12.0g

Instructions

Weigh 63.4g of this product into 1L of distilled or deionized water, heat and boil until completely dissolved, divide into test tubes, sterilize at 121°C for 15 minutes under high pressure or at 115°C for 30 minutes. After sterilization, shake well and make a high-level inclined surface for later use.

Quality control example

1. Physical and chemical testing

Inspection items	Inspection standards	Inspection results
Powder appearance	Orange red powder, uniform and free of impurities	Orange red powder, uniform and free of impurities
Solution or colloid	Orange red, transparent and free of impurities	Orange red, transparent and free of impurities
Gel strength	550 ~ 750g/cm ²	650g/cm ²
pH(25°C)	7.3±0.1	7.26
Moisture content	≤5%	3.5%

2. Sensitivity test (Prepare a high-level agar slant and incubate at 30-35°C for 18-24h)

Quality control strains	Growth	Conclusion
Salmonella paratyphoid type B CMCC(B)50094	H ₂ S production, gas production, and large-scale acid production throughout the pipeline	Pass
Shigella flexneri ATCC 12022	H ₂ S negative, lactose and sucrose negative, using glucose to produce acid but not gas	Pass
Escherichia Coli CMCC(B)44102	H ₂ S negative, gas production, and significant acid production throughout the entire pipeline	Pass
Proteus mirabilis ATCC 12453	H ₂ S negative, lactose and sucrose negative, using glucose to produce acid but not gas	Pass

Conclusion: The physical and chemical properties as well as sensitivity of the product are qualified, and the product is qualified.