

UNI 7937: 2004

**Scheda 26 : TSC agar con cicloserina (Sulfite cicloserina agar)**

**5.2 Sulfite cicloserina agar (SC)**

**5.2.1 Base**

**Composition**

Enzymatic digest of protein	g	15
Enzymatic digest of soya	g	5
Yeast extract	g	5
Disodium disulfite ( $\text{Na}_2\text{S}_2\text{O}_3$ ), anhydrous	g	1
Ammonium iron(III) citrate (*)	g	1
Agar	g	9-18 (**)
Water	ml	1000

(\*) This reagent should contain at least 15 % (mass fraction) of iron. I

(\*\*) Depending on the gel strength of the agar.

**Preparation**

Dissolve the components in the water by boiling. Adjust the pH so that after sterilization it will be  $7,6 \pm 0,2$  at  $25^\circ\text{C}$ . Dispense the base into flasks or bottles of appropriate capacity. Sterilize for 15 min at  $121^\circ\text{C}$ . Store in a refrigerator at  $5^\circ\text{C} \pm 3^\circ\text{C}$ . Discard unused medium 2 weeks after preparation.

In some cases (see 9.4.3.1), it may be necessary to prepare dishes of SC agar base medium for confirmation with the nitrate motility medium (5.5) and the lactose--gelatin medium (5.8). For this purpose, transfer portions of about 15 ml of the base [melted and cooled to approximately  $44^\circ\text{C}$  to  $47^\circ\text{C}$  using a water bath (6.10)] into Petri dishes and allow to solidify. Immediately before use, dry the plates (see ISO 7218).

**5.2.2 D-Cycloserine solution**

**Composition**

D-Cycloserine (*)	g	4
Water	ml	100

(\*) Use white crystalline powder only.

**Preparation**

Dissolve the O-cycloserine in the water and sterilize the solution by filtration. Store in a refrigerator at  $3^\circ\text{C} \pm 2^\circ\text{C}$ . Discard unused solution 4 weeks after preparation.

**5.2.3 Complete medium**

Immediately before use in the pour-plate method (see 9.2), to each 100 ml of sterile molten base (5.2.1) cooled to  $44^\circ\text{C}$  to  $47^\circ\text{C}$ , add 1 ml of D-cycloserine solution (5.2.2).