

XLD (Xylose Lysine Desoxycholate) Agar



Medium used for the isolation of *Salmonella* spp. from pharmaceutical products.

* Equally use with MFDS (MB-X1060K), QIA (MB-X1060Q) and NIER (MB-X1060N).

• CONTENTS (Liter)

Yeast Extract	3.0 g
L-Lysine	5.0 g
Xylose	3.75 g
Lactose	7.5 g
Sucrose	7.5 g
Sodium Desoxycholate	2.5 g
Ferric Ammonium Citrate	0.8 g
Sodium Thiosulfate	6.8 g
Sodium Chloride	5.0 g
Agar	15.0 g
Phenol Red	0.08 g

Final pH = 7.4 ± 0.2 at 25°C.

• PROCEDURE

Suspend 56.93 G of powder to 1 L of distilled or deionized water. Heat to boiling until completely dissolved. DO NOT AUTOCLAVE. Cool to 45-50°C in water bath. Mix well. Dispense in petri dishes.

• INTERPRETATION

XLD (Xylose Lysine Desoxycholate) Agar is a selective medium used for the isolation of *Salmonella* spp. from pharmaceutical products. Xylose, lactose and sucrose are sources of fermentable carbohydrates. Sugar fermentation produces acid, phenol red indicator to change its color to yellow. Sodium chloride provides osmotic balance. Yeast extract provides nitrogen and vitamins. Sodium desoxycholate is inhibitory to gram-positive microorganisms. Sodium thiosulfate and ferric ammonium citrate are components of H₂S indicator system. It is included for the visualization of hydrogen sulfide produced, resulting in the formation of colonies with black centers.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 35 – 37 °C for 24 ± 2 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light pink.

Prepared medium

Appearance: slightly opalescent.

Color: light red.

Incubation conditions: 35 - 37 °C / 24 ± 2 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Salmonella typhimurium</i>	14028	50-100	good	red with black centers
<i>Escherichia coli</i>	25922	50-100	partially inhibited	yellow colonies

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

• REFERENCES

1. Taylor, W.I. (1965). Am. J. Clin. Pathol. 44(4) : 471-475.
2. Pollock, H.M., and B.J. Dahlgren (1974). Appl. Microbiol. 27(1): 197-201.
3. Refer to the MFDS, the QIA and the NIER.

• PACKAGE

Cat. No : MB-X1060 XLD (Xylose Lysine Desoxycholate) Agar	500 G
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