

## PRODUCT INFORMATION

XLD Agar

Cat. No. X24-101

### DESCRIPTION

XLD Agar is used for isolation and differentiation of gram-negative enteric bacteria. It was particularly developed for *Shigella* and *Salmonella*.

The three fermentable carbohydrates (xylose, lactose and sucrose) are degraded, producing acid that is manifested in a color change from red to yellow. Sodium thiosulfate works as a reactive substance, with Ferric ammonium citrate as an indicator of the formation of hydrogen sulfide under alkaline conditions. Furthermore, lysine decarboxylase can be detected by the indicator changing back to red.

### FORMULA (g/L)

Yeast Extract	3.0 g	Ferric Ammonium Citrate	0.8 g
L-Lysine	5.0 g	Sodium Thiosulfate	6.8 g
Xylose	3.5 g	Sodium Chloride	5.0 g
Lactose	7.5 g	Phenol Red	0.08 g
Sucrose	7.5 g	Agar	13.0 g
Sodium Deoxycholate	2.5 g		

Final pH: 7.4 ± 0.2 at 25 °C

\*Grams per liter may be adjusted or formula supplemented to obtain desired performance.

### PREPARATION

Mix 55 grams of the medium in one liter of purified water until evenly dispersed. Heat with repeated stirring and boil for one minute to dissolve completely. DO NOT AUTOCLAVE.

### QUALITY CONTROL SPECIFICATIONS

1. The powder is homogenous, free flowing and light pinkish-beige.
2. Visually the prepared medium is bright red-orange and clear to trace haze.
3. Expected cultural response after 18-24 hours at 35 °C.



ORGANISM	RESULT
<i>Enterobacter aerogenes</i> ATCC 13048	Good Growth – Yellow colonies
<i>Enterococcus faecalis</i> ATCC 29212	Inhibited
<i>Escherichia coli</i> ATCC 25922	Inhibited
<i>Proteus mirabilis</i> ATCC 12453	Good Growth – Yellow w/ grey-black center
<i>Salmonella typhi</i> ATCC 19430	Good Growth – Yellow w/ grey-black center
<i>Salmonella typhimurium</i> ATCC 14028	Good Growth – Red w/grey-black centers
<i>Shigella flexneri</i> ATCC 12022	Good Growth – Red colonies

## STORAGE

Store the sealed bottle containing the dehydrated medium at 2 to 30°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is not free flowing or if the color has changed from the original color.