

66481 OGYE *ChromoSelect* Agar Base (Oxytetracyclin Glucose Yeast Extract *ChromoSelect* Agar)

OGYE *ChromoSelect* Agar is a selective and differential medium which facilitates rapid isolation of yeasts and moulds from milk and milk products. Oxytetracycline makes the medium more selective by inhibiting the growth of Lactobacilli. *A. niger* appears as light blue coloured colonies with black spores due to presence of chromogenic mixture, *C. albicans* shows green coloured colonies and *Sacch. cerevisiae* gives colourless colonies.

Composition:

Ingredients	Grams/Litre
Yeast extract	4.0
Dextrose	20.0
Chromogenic mixture	1.1
Agar	12.0
Final pH 7.0 +/-0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Directions :

Suspend 18.55 g in 500 ml distilled water. Boil to dissolve the medium completely. Sterilise by autoclaving at 121°C for 15 min. Cool to 50°C and aseptically add reconstituted contents of one vial of Oxytetra Selective Supplement (Cat. No. 51239). Mix well and pour into sterile petri plates.

Principle and Interpretation:

OGYE Agar Media were originally formulated by Mossel et al (1,2) for the isolation and enumeration of yeast and moulds from foodstuffs. Mossel et al (3) further added Oxytetracycline as a selective agent and found that the use of Oxytetracycline in a medium with a neutral pH gives increased counts of yeasts and moulds as compared to media having a low pH to suppress bacterial growth.

Yeast extract provides nitrogenous compounds, vitamin B complex, amino acids and other essential growth nutrients. Dextrose serve as carbon and energy source. Oxytetracycline makes the media more selective by inhibiting the growth of Lactobacilli encountered in milk and milk-products. Incorporation of chromogenic compounds into the growth medium helps in identification of yeasts and moulds isolated directly on primary isolation. *Aspergillus niger* appears as light blue coloured colonies with black spores due to presence of chromogenic mixture, *C. albicans* shows green coloured colonies (because of β -N-acetylgalactosaminidase) and *Sacch. cerevisiae* gives colourless colonies.

Cultural characteristics after 2-3 days at 25°C.

Organisms (ATCC)	Growth	Colour of Colony
<i>Aspergillus niger</i> (16404)	+++	light blue with black spores
<i>Candida albicans</i> (10231)	+++	green
<i>Saccharomyces cerevisiae</i> (19615)	+++	colourless
<i>Escherichia coli</i> (25922)	-	-



References:

1. D.A.A. Mossel, et al., Oxytetracycline-Glucose-Yeast Extract Agar for selective enumeration of moulds and yeasts in foods and clinical material, J. appl. Bact. 33, 454 (1970)
2. D.A.A Mossel, G.H. Harrewijn, J.M. Elzebrock, UNICEF (1973)
3. D.A.A. Mossel, M. Visser, W.H.J. Mengerink, A comparison of media for the enumeration of moulds and yeasts in foods and beverages, Lab. Pract., 11, 109 (1962)
4. Nakanishi, Modern Media, An isolation agar medium for cholerae and enteropathogenic halophilic vibrios, 9, 246 (1963)
5. R Buttiaux, M. Catsaras, L'analyse bactériologique de bières, Ann. Inst. Pasteur, 16, 167 (1965)
6. H. Modde, Klinisch-bakteriologische Aspekte der Gentamicintherapie, Therap. Umschau, Suppl. 1, 6 (1969)
7. M. Sainclivier, A.M. Roblot, Choix d'un milieu de culture pour le dénombrement des levures et moisissures dans le beurre, Ann. Inst. Pasteur, 17, 181 (1966)
8. International Organisation for Standardisation (ISO), ISO/DIS 6611 (1992)



Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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