



NQAC

Nestlé Quality Assurance Center
Dublin

Technical Datasheet

Analysis Name: Osmophilic Mold and Yeast

Method Number: NQA-00.4420

Scope of Application: Osmophilic Mold and Yeast can grow in highly concentrated sugar solutions or in food products containing high sugar concentrations, such as sweetened condensed milk, jams, chocolate candy with soft centers, honey, molasses, corn syrup, caramel, concentrated fruit juices, and other similar products.

Description: Osmophilic microorganisms most commonly encountered in the food industry are fungi (molds and yeasts). These organisms are capable of growth at a reduced water activity (a_w : < 0.85) when all other conditions (pH, temperature, Eh, and nutrients) remain near optimum.

Sample Weight Required: 25 g

Method Reference: Compendium of Methods for the Microbiological Examination of Foods, 2001, 4th Ed., Chapter 17, APHA, Washington DC.

Analytical Platform: Cultural Method

Special Information: Yeasts which grow or tolerate high salt concentrations are termed halophiles and are not included in the Osmophilic yeasts. Xerophilic ("dry - loving") molds will also grow at reduced a_w or below 0.85. Only halophilic bacteria are able to grow below this a_w level.

Analyte Reported	Alias	Unit of Measure	Limit of Quantification	Reproducibility
Osmophilic Mold		Per g	<10 CFU/g	
Osmophilic Yeast		Per g	<10 CFU/g	0.277
Osmophilic Mold		Per mL	<1 CFU/mL	
Osmophilic Yeast		Per mL	<1 CFU/mL	0.277