

SYNOPSIS

IS 17178 : 2019/ ISO 18787 : 2017

Indian Standard Foodstuffs — Determination of Water Activity

a) Scope: This standard establishes basic principles and specifies requirements for the methods of determining water activity (a_w) of food products for human consumption and animal feed within a measurement range of 0 to 1. The measurement principles are based on the dew-point measurement or on the determination of the change in electrical conductivity of an electrolyte or in the permittivity of a polymer. The method does not apply to products stored below their freezing point (equivalent to the temperature at which ice crystals appear in the product), neither to products corresponding to a water-in-fat emulsion, nor to crystal products such as sugars, salt or minerals. For products containing volatile compounds, such as alcohols, specific equipment adaptations may be necessary to apply the method.

b) Salient features of content: This Indian Standard which is identical with ISO 18787 : 2017 'Foodstuffs — Determination of Water Activity' issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on recommendation of the Test Methods for Food Products Sectional Committee and approval of the Food and Agriculture Divisional Council.

Water activity is the ratio of the partial water-vapour pressure in equilibrium with the product analysed to the water vapour saturation pressure in equilibrium with pure water at the same temperature.

c) Types/grades/classes, if any covered in the standard: N.A.

d) Disclaimer (to be automatically provided by the program/software)