

Name of the Technology/Product : Iodine Value Meter

Laboratory Name	CSIR-Central Scientific Instruments Organisation, Chandigarh
Brief Profile of Technology/Product	<p>Iodine Value Meter:</p> <p>Iodine Number is the number of centigrams of iodine absorbed by one gram of oil or fat. It is a measure of degree of unsaturation of edible oils. Different edible oils have different iodine number due to varying degree of unsaturation. Thus it can be used to identify / check the quality of different edible oils. The developed instrument is portable, low cost, direct display of iodine number, easy to operate and gives reproducible results. It consists of two sub-systems:</p> <p>Sensing system: It consists of working electrodes & test solutions</p> <p>Measuring & Display System: The instrument is based on potential change between two electrodes, one reference and other sensing electrode when immersed into a mixture of test reagent & oil. Change in potential across two electrodes is a direct measure of iodine number displayed on LCD.</p> <p>The developed instrument has Measuring Range: 0–199 Iodine number; Accuracy: ± 2 Iodine number</p> <p>Display : 3 ½ Digit LCD</p> <p>Electrode : Combined Electrode Platinum & Calomel</p> <p>Battery / Mains : For display operation 9V Cell & 220V/50Hz mains</p> <p>Dimension : 17.4cm(L)x 14cm(B)x 7.3cm(D)</p> <p>Weight : 1Kg (Approx.)</p>
Returns/Benefits	To check the quality of different edible oils
Validation Level	Prototype
IPR Status [also indicating the status of the patent (if any) in 2015]	Patented in India [A device useful for the determination of degree of unsaturation in oils in terms of Iodine Number, 199695 dated 06.10.2006]

End product price (if not available, estimated price)	Rs. 10,000-50,000/-
Technology/Product Collaborator	None, in-house development. But Product has already been transferred to M/s Vaisheshika Electron Devices, Ambala; M/s Chemo Electronic Laboratory of United Phosphorous Limited, Gujarat
Relevance of Technology in present times	It can help in detecting spuriousness of edible oils
Similar technology/product developed	Not-available in international market But M/s Hach has developed one
Picture of the technology/product (if any, with good resolution)	