

Mini distilling apparatus for essential oils

The Institute of Himalayan Bioresource Technology in Himachal Pradesh, India, has developed a mini essential oil distillation apparatus, suitable for small-scale distillation of essential oils from aromatic plants. The apparatus can be used for steam distillation, water distillation, as well as steam and water distillation of lighter and heavier essential oils.

The robust and portable still is made of SS304 stainless steel and Borosil glass. It comes in 25 l and 50 l capacities, capable of processing per batch 4-5 kg and 8-10 kg of plant material respectively. The apparatus allows different modes of heating: LPG burner, direct heating with fuel wood or agro-waste, diesel or kerosene burner, electrical, or steam injection. Distillation using the apparatus is simple. The vessel is charged with plant material and sufficient water, and the lid is tightly closed. The condensing system is placed above the still and tightened using clamps. Appropriate water connections are made to the condenser. The oil retention glass tube is filled with water through the air vent, and the vessel is heated. Vapours formed will start condensing into oil. Heating is stopped when the level of oil condensed remains static, and the oil floating on the water is collected. Anhydrous sodium sulphate is used to dry the water droplets present in the oil. The apparatus is commercially manufactured by Andel Equipment Ltd., which holds the manufacturing licence. *Contact: Andel Equipment Pvt. Ltd., 161, Industrial Area, Phase 9, Mohali, Punjab, India. Tel: +91 (172) 213861, 214034; Fax: +91 (172) 212693; E-mail: andelindia@usa.net.*