

Simple distillation lab report assignment



**ASSIGN
BUSTER**

Fractional distillation is almost the same as the simple distillation, the only preference is that in a fractional distillation, fractionating column is used which is attached at the top end of the pear-shaped flask and it is connected to the condenser as well. Vacuum distillation is a process used to reduce the pressure to a lower boiling point. In a vacuum distillation, the solvent's boiling point should be over OFF or ICC. This distillation method is used to recuperate the solvent's higher boiling point. Finish Thompson Inc.) In a steam distillation process, the main objective is to separate the two components in a temperature that is lower than their decomposition point. Steam distillation is process of separation to separate natural aromatic compounds. In order for the boiling point of the mixture to subside, steam or water is to be put in the distillation apparatus. (Helplessness's, 201 3) The group performed simple distillation in order to separate the alcohol content of vodka from the solution.

The objective of this experiment was to separate the alcohol component in the Vodka (Antonio) and to compute for its percentage of ethanol.

MATERIALS AND METHODS A. Materials The materials the group used in this experiment are Vodka (Antonio), boiling tones, alcohol lamp and the quick-fit apparatus which consist of the following: iron stand, iron ring and iron clamp for support, pear-shaped distilling flask, distillation head, thermometer, thermometer adapter, condenser, vacuum adapter and test tubes. **B.**

Methods The very first step in this experiment was to make the simple distillation set-up.

The iron clamp attached to the iron stand became the supporting apparatus for the distillation head, which was connected to the pear-shaped flask and

another iron clamp attached to the iron stand was supporting the condenser, which a part of the distillation head and the vacuum adapter was connected to. The thermometer was attached at the top end of the distillation head together with the thermometer adapter to see the regulation of the temperature. The group prepared 20 test tubes and it was calibrated to ml, marked the lower meniscus of it using a marker and labeled it accordingly.

The group placed at least three boiling chips/stones into the pear-shaped distilling flask and added ml of Vodka (Antonio) inside the said flask. Boiling chips were placed inside the pear-shaped distilling flask in order to avoid bumping of molecules and prevention of avian a contamination. Alcohol lamp was used as the heat source. The group rotated it under the pear-shaped distilling flask in order for the liquid mixture to boil. Each of the calibrated and numbered test tubes, the group collected 0. ml of distillate and while collecting the distillate, the temperature at which the distillate was collected was recorded.