The Esquilmo Whey of Natural Cheese an Alternative to Prevent Fires at Home

Gomez Quintana, Clara Benitez Serrano, Jesus

Aculco is a cheese village; processing about 100,000 liters of milk daily, which obtains 10,000 kg of cheese and 85.000 liters of whey. The whey or cheese whey is the liquid that is separated from milk when it is coagulated to obtain the cheese, this is a very important problem in the regional dairy industry and it has a high ecological and economic impact. Ecological because when the whey is pull down into the drainage, lactose is converted to lactic acid, acidified water causing a decrease in pH of the tributaries of the Cofradia's lake causing a serious damage in the aquatic wildlife due to an economic impact on agricultural production reducing the yield per hectare. General Purpose: Experiment and value the reaction of formaldehyde lacto whey and other chelating additives on the design and construction of thermal plates for electrical contacts, resistance to fracture, good condition, aesthetics to prevent the spread of fire, as an alternative to reduce the availability of whey on the ecological impact in Aculco State of Mexico. To sum up, Mixing whey with formalin and chelating substances react favorably producing a malleable slurry with high mechanical properties tolerant fracture, sharp blue flame resistant, withstands extreme temperatures moderately muffle, with good physical appearance and can be used for the electrical contacts manufacture at the level of avoiding electric shocks. Impact 1: The conversion of whey into whey paste allows BOD, COD, TSS of wastewater, due to the minor presence of solids amounts suspended and thismakes a body of water increases the ability to support aquatic diversity. Impact 2: When the whey glycoproteins are retained in the lacto serumaste, has a direct impact on the reduction of lactic acid formation