The Kastle-Meyer test is a widely used presumptive test for detecting the presence of hemoglobin in blood stains, playing an important role in forensic investigations and crime scene analysis.The proper procedure involves first applying a few drops of ethanol to the suspected stain, followed by the reduced phenolphthalin solution, and finally a drop of hydrogen peroxide.When this colorless solution comes into contact with blood and hydrogen peroxide, the hemoglobin acts as a catalyst, causing the hydrogen peroxide to oxidize the reduced phenolphthalin back to phenolphthalein.The test capitalizes on the peroxidase-like activity of hemoglobin using phenolphthalin (reduced form of phenolphthalein) as an indicator.For instance, certain plant materials containing peroxidases, some metals, and chemical oxidants can potentially trigger a similar color change.