



IS 1061: 2017

Disinfectant Fluids, Phenolic Type – Specification

IS 1061: 2017 defines specifications for **phenolic-type disinfectant fluids**, which are used for **sanitizing surfaces** in various settings. These disinfectants come in two classes, **black** and **white**, based on their **compatibility with different water types**. They are further classified into six grades, determined by their germicidal strength, and two types based on their stability at specified temperature ranges (normal and winter conditions).

Consumers expect disinfectant fluids to be highly effective against a broad range of **microorganisms, stable when diluted or stored, and free from harmful compounds** such as mercury. Additionally, they should remain **uniformly mixed** with water without separation, particularly in hard or saline water environments. Disinfectants are also expected to maintain their **germicidal effectiveness over their shelf life**.

The standard addresses these quality expectations by defining stringent criteria for composition, germicidal value, and stability.

Black disinfectant fluids should contain coal tar or petroleum-derived acids, phenolic compounds, and emulsifiers, while white fluids should form stable, fine emulsions.

Germicidal efficacy is evaluated by two coefficients, the **Rideal Walker** and **Staphylococcal coefficients**, which measure the disinfectant's effectiveness against standard bacterial cultures. Stability tests ensure the fluids remain miscible with water and retain their germicidal value after dilution and storage.

Packaging requirements mandate **corrosion-resistant containers**, and all products must display relevant details, including batch information, expiration, and a statement of mercury-free composition. Testing protocols for quality control involve routine sampling from each batch, with strict compliance to ensure consistency across production.