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PTC Test Paper – Technical Fact Sheet

Product P/N: 165
Description: PTC Test Papers
Packaging: Each individual test paper measures 1.875" x 0.25"
These papers are normally sold in vials containing 100 test papers or in bulk bags.

Manufacturing Process:

1. 15 grams of high grade (> 98%) N-Phenylthiourea (PTC - Phenylthiocarbamide) (CAS# 103-85-5) purchased from the Sigma-Aldrich company is completely dissolved in 10 gallons of reagent grade ethanol.
2. Sheets of raw paper (white, smooth, cellulose with wet strength resin) measuring 20" by 26" are manually dipped into the chemical mixture. The wet sheets are hung vertically and allowed to dry completely in a well-ventilated processing room.
3. The chemically treated dried sheets are cut into test papers (1.875" x 0.25").
4. The test papers are packed in their final packaging format (vial or bag).

Chemical Content:

- Each 10 gallon batch of chemical yields approximately 850 sheets of treated paper.
- 850 sheets of treated paper yield 850,000 test papers. Each treated test paper weighs about 20 milligrams. The total weight of paper treated is therefore about 17,000 grams. The PTC content of each test paper is less than 0.1% w/w (15 grams distributed over 17,000 grams of paper).
- The amount of PTC in each test paper is less than 0.1% of 20 milligrams (or no more than 20 micrograms).

Proper Use of Test Papers:

- The test papers are commonly used in educational studies of genetic traits. PTC test papers are used to differentiate users' ability to detect bitter.
- Proper use of the test papers involves touching a small portion of the test paper to a small area of the tongue. The whole paper should not be used. The test paper should not be swallowed.
- The test papers should only be used as an educational tool and should always be used under the direct supervision of a qualified instructor.

More Information:

- The raw paper is procured from Ahlstrom Fiber Solutions. The Grade is 8263. Specifications are available on the Ahlstrom website. The specific process involved in making this grade paper is unknown to Precision Laboratories. For example, we do not know if the paper is bleached. We do not know how the paper fibers are obtained.
- The color of the paper is white. No GE brightness level is available.
- The paper is not lined.
- The paper is not bound.
- The paper has no printing – no text or no graphics added.