Cigarette Products

Read the full **Toxicological Evaluation Guideline: Cigarette Products** here.

The purpose of the toxicological evaluation is to provide a basis for assessing whether the potential for product changes or new designs increases the inherent toxicity of cigarette smoke using established non-clinical toxicology testing methods.

Toxicological Evaluation of Cigarette Ingredients

Ingredients have been used in the manufacture of certain cigarettes to complement the subjective characteristics of the different tobacco types, and provide the distinctive flavors, tastes, and aromas associated with different cigarette products. Toxicological testing provides a basis for assessing the potential for the ingredient(s) to increase the inherent toxicity of cigarette smoke.

In a multi-year cigarette ingredient testing program, we utilized a set of chemical and biological endpoints frequently used in toxicity testing. We used a tiered approach where progressively more in-depth chemical analyses and biological assays were performed as the potential intended use level of the ingredient increased. Qualified testing laboratories collected the data by using validated and controlled testing methods.

We evaluated a total of 95 potential cigarette ingredients and published the results in 11 publications contained in a special issue of Inhalation Toxicology in 2011. In summary, when assessed against the variability of assay methodology, natural agricultural change and manufacturing control, the ingredients studied demonstrated little relevant influence on the inherent toxicity associated with mainstream cigarette smoke.

Toxicological Information on Cigarette Ingredients

Over the years, we have compiled toxicological information on cigarette ingredients, which is shown in this table for several of the major ingredients that we use in Philip Morris USA's cigarette products. For each ingredient you will find a wide array of scientific information, including biological and chemical data relating to the use of these ingredients in tobacco and food products, data on the toxicity of the ingredient (when applied to tobacco as part of a cigarette) and combustion and pyrolysis data.