

Flash Point: A Critical Review

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The flash point is an important indicator of the flammability of a chemical. For safety purposes, many data compilations report the lowest value and not the most-likely. This practice, combined with improper documentation, has resulted in compilations filled with fire-hazard data that are inconsistent with related properties and between members of homologous chemical series. In this work, the flash points reported in the DIPPR[®] 801 database and more than 1400 other literature values were critically reviewed based on measurement method, original source, and several inter-property relations. Measurements for nearly thirty compounds were made to resolve conflicting and missing data points. With this critically reviewed set of experimental data, published predictive methods for flash point were evaluated for accuracy.