The Flash Point and Autoignition Temperature of n-Dodecane

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The autoignition temperature (AIT) of a material is the lowest temperature at which the material will spontaneously ignite. The flash point of a liquid is the lowest temperature at which sufficient vapor is evolved to form a flammable mixture in air at standard atmospheric pressure. The flash points and AIT are the best known and most widely used flammability property for the evaluation of the flammability hazard of flammable and combustible liquids. The flash point and autoignition temperature(AIT) are primary properties used to determine the fire and explosion hazards of a liquid. The regulations for the safe handling, transportation, and storage of such substances are dependent on this classification. For the safe handling of n-dodecane, the explosion limits were investigated and the lower flash points and AITs(autoignition temperatures) by ignition delay time were experimented. The lower flash points of n-dodecane by using closed-cup tester and open cup tester were experimented.