



# Flammability Rating of Dymax Conformal Coating

## What are the UL 94V Series of Flammability Ratings?

UL classifies the 94V series as a vertical burn test that self-extinguishes in a specific period of time. It is broken down into three ratings, V-0 through V-2, with the latter taking the longest to self-extinguish.

The test is conducted on a panel that is coated with a specific conformal coating to a given thickness. The panel is suspended vertically and a flame brought to the edge of the panel. The flame is held to the panel for a specific period of time and removed. If the panel is still burning when the flame is removed, the time it takes to self-extinguish is recorded. Once extinguished, the flame is held once again to the panel for a specific period of time. Again, the flame is removed and if burning, the time it takes to self-extinguish is recorded. Also, an observation is made to look for any burning debris coming off of the panel. Depending on the results, UL will classify the product accordingly.

UL 94V-0 is the most difficult test to pass.

For more information on UL's 94V series, please visit [www.ul.com](http://www.ul.com).

## What Other Flammability Tests are Available?

UL also has a test which rates products to an H series, or horizontal, burn test. This test, although not as severe as the V series, demonstrates and provides customers with a self-extinguishing product for less-stringent applications and environments.

Additionally, under Mil Spec. I-46058-C and IPC-830A, a test similar to UL's H (horizontal burn) series is included under these specifications.

## What are Some Important Criteria to Remember When Submitting Samples for Flammability Testing?

A successful flammability rating depends on the quality and effectiveness of the self-extinguishing properties of the board itself, its components and the coating thickness. The boards are rated under the same flammability guidelines as the coatings.

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