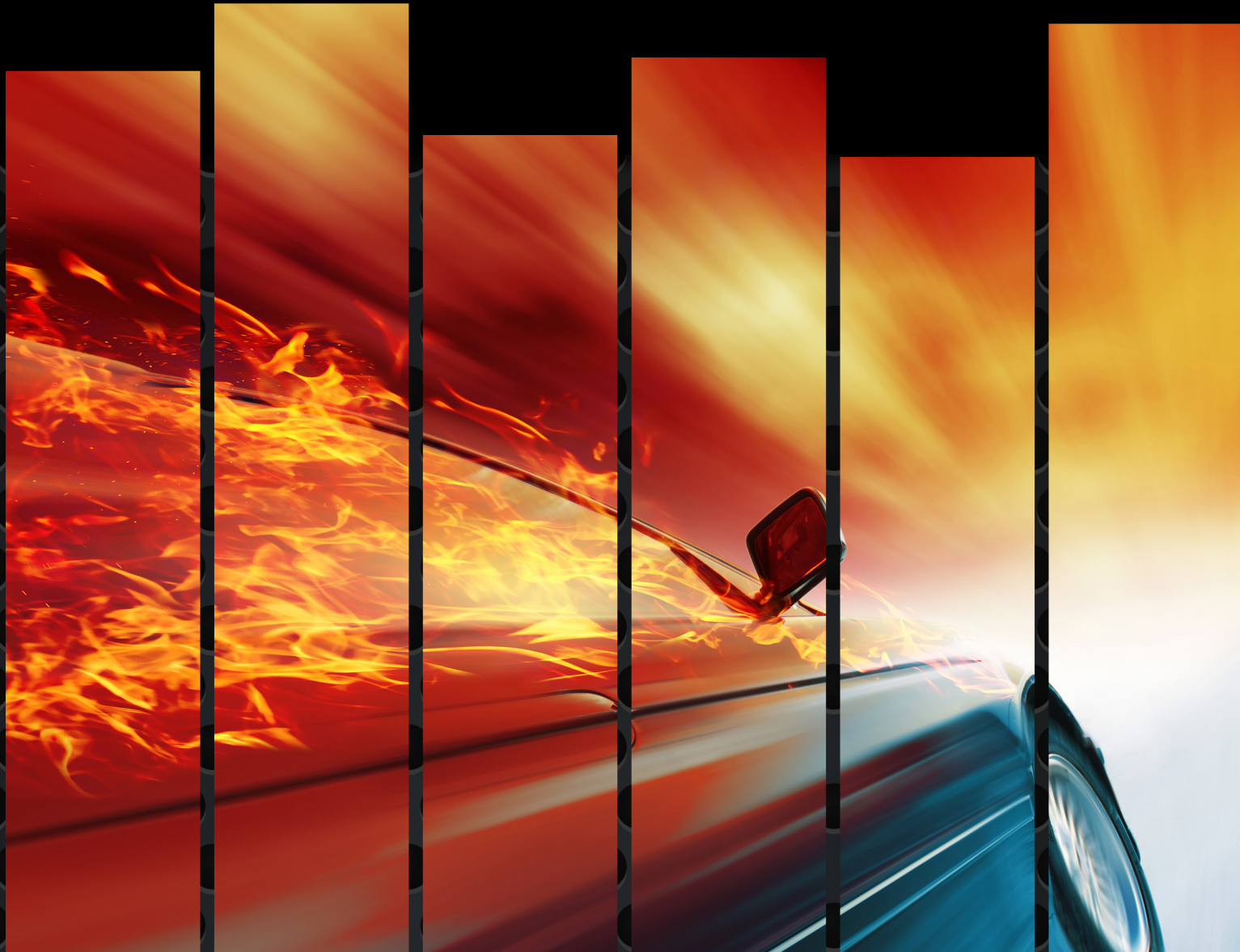




AUTOMOTIVE FLAMMABILITY

FMVSS 302 & OTHER OEM FLAMMABILITY TESTS



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What is FMVSS 302?

Federal Motor Vehicle Safety Standard No. 302 was written to control the burn rate of materials used in automotive interiors. The intent of this specification, adopted in 1971, was to slow the burn rate of interior materials to allow occupant evacuation in the event of a fire.

What is the requirement of FMVSS 302?

FMVSS 302 requires the Automaker to certify to the federal government that the interior materials will burn at a rate of 102 mm/min or slower. This testing is to be performed on actual parts. If the part is not large enough to allow the sample needed for testing then surrogate testing on test plaques is allowed (102 mm x 355 mm).

Can a Plastic Producer or Compounder certify its material to FMVSS 302?

No, the only entity that can certify to FMVSS 302 is the Automaker. Anyone other than an Automaker certifying to FMVSS 302 is not following the law. Therefore, by law, a Plastic Producer or Compounder is not able to certify a resin to FMVSS 302.

What can a Plastic Producer or Compounder do to ensure compliance with FMVSS 302?

ISO 3795 is a test method developed to follow the FMVSS 302 methodology but allow the results to be certified by the tester. A Plastic Producer or Compounder can provide documentation on the compliance of their compound to ISO 3795.

My Automaker or Tier Supplier is requiring certification to some other standard.

As part of ISO documentation procedures, most all Automakers have developed their own test version of FMVSS 302 or ISO 3795. Example test methods include: HES C 206, TL1010, GMW3232, and TSM0500G. Some Automakers allow the ISO 3795/SAEJ369 version of the test to be certified. These flammability tests are required by each Automaker during the resin approval process. This flammability property information is available at the Automaker once the resin is approved to the specification.



My Automaker is requiring annual recertification of FMVSS 302.

The Automaker is required to recertify compliance to FMVSS302 on an annual basis. The Automaker will require their Tier 1's to recertify parts on an annual basis. But as a raw material, the Automakers only require plastics to be certified at time of approval. No recertification is required for plastic raw materials. Most Plastic Producers or Compounders will help support this process for their molders.

What about Electric Vehicles and Flammability requirements?

Electric Vehicles are just like any other vehicle and must be certified to FMVSS 302. But those components that are in contact with the electrical grid usually have other requirements as well. Here you will see the Underwriters Laboratory Flammability requirement UL 94 being used. Most components will need a minimum of a UL 94 V-0 rating. Some Automakers might require other ratings such as UL 94 5VA or 5VB. These are just more extensive and severe versions of the flammability requirement. Typically, these requirements will be limited to Charging Cord, Charging Port and On Board Charger.

