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## To whom it may concern

This is a horizontal burning test, based on the test method and conditions of US Federal Motor Vehicle Specification FMVSS302. DIN 75200 is the German equivalent. The test requires 5 specimens measuring 356 x 100 mm at the thickness in use. Each specimen is mounted in the test jig in a horizontal position and a small flame (9 mm diameter) from a Bunsen burner is applied for 15 seconds. The time for the flame to propagate 254 mm (10 ") is determined. The result is expressed as horizontal burning speed in mm/min. It is important to note that this standard does *not* contain any explicit requirements or rating systems; it is left to legislation or OEM specifications to impose a limit based on the horizontal burning speed.

Several automotive OEM's have standards based on the test method of ISO3795. They also define one or more limits and are to be performed on parts and/or assemblies, and not for materials. It is the responsibility of the component manufacturer to determine the flammability performance of molded components or assemblies. Because flammability results are dependent upon part thickness and geometry, it is not possible for Ravago to certify a material according to one of these standards. Ravago has performed tests according to ISO 3795 on injection molded plates to determine indicative values for material selection purposes (see <a href="below">below</a>).

## **OEM Standards based on ISO 3795**

Standard	Scope	Limit burning speed [mm/min]	Comment
FMVSS 302	USA	101.6	
VW TL1010	Volkswagen	100	
GM 60261	General Motors	100	average + 3 * standard deviation should be less than limit as well
D45 1333 / B	Renault	100	Standard also has classification scheme
UTAC ST 18-502-1	Bus interiors	100	Standard also has classification scheme
EC/95/28, Annex IV	Bus interiors	100	Standard also has classification scheme

Polymer	Tradename	Grade	Colour	Thickenss mm	Burning rate mm/min
PA 6	Ravamid	B - R200	All	3,2	< 80
PA 6.6	Ravamid	A - R210	All	3.2	<80

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