

Test Report No.: 10394 / 35495

Date: 18.12.2012

BASF SE
Brandschutztechnik
G-KTF/EA - A521
D-67056 Ludwigshafen

Test according to

49 CFR 571.302 : 2008-10

Title 49 - Transportation; Chapter V - National Highway Traffic Safety Administration - Part 571 Federal Motor Vehicle Safety Standard (FMVSS) No. 302 Flammability of interior materials - corresponding to DIN 75200 - (horizontal test)

Client:

Henkel AG & Co. KGaA Heidelberg
Standort Heidelberg
Henkel-Teroson-Strasse 57

69123 Heidelberg

The results refer exclusively to the tested samples.

As an accredited Test Laboratory, the BASF SE Fire Safety Technology Test Centre is authorized to conduct fire tests in accordance with DIN EN ISO/IEC 17025 : 2005.

DAkkS-Register-No.: D-PL-14121-07-00



Deutsche
Akkreditierungsstelle
D-PL-14121-07-00

BASF – Fire Safety Technology

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Receipt of order: 09.11.2012
Receipt of samples: 23.11.2012
Date of test: 18.12.2012

1. **Material:** (Information supplied by client)

Macromelt OM 638

Colour:

End use application: overmold printed circuit boards

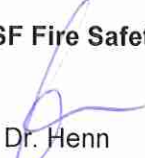
2. **Summary of results and classification:**

according to FMVSS 302: passed 0 mm/min

Remarks:

Any conclusions we draw about the fire safety of the materials we test are based exclusively on the results of the test under the conditions described.
The extent to which such conclusions can be applied to non-tested material under non-standard conditions is the sole responsibility of the customer and is done so at his own risk.

BASF Fire Safety Technology


Dr. Henn
Head of Laboratory

Ludwigshafen, 18.12.2012


Kaiser
Technician

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3. Material:

Information supplied by client

Macromelt OM 638
test specimen made of Macromelt OM 638, no support material used

Additional details from test laboratory

Colour: black

4. Samples:

Sample size (determined by BASF test laboratory):

Length:	357,00	[mm]	Weight:	190,65	[g]
Width:	101,60	[mm]	Weight per unit area:	5,25	[kg/m ²]
Thickness:	5,64	[mm]	Density:	931,95	[kg/m ³]
Outer diameter:		[mm]	Remarks:		
Inner Diameter:		[mm]			

Pre-conditioning:

	Conditions	Duration days
Client: (Information supplied by client)		
Test Laboratory:	Standard 23/50-1 DIN 50014	25

Sample preparation:

Exposed surface: smooth side

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5. Test results:

Sample		1	2	3	4	5
Supporting wire used	[yes/no]	no	no	no	no	no
Burning droplets / debris	[s]	---	---	---	---	---
Ignition time	[s]	---	---	---	---	---
Extinguishing time	[s]	---	---	---	---	---
Time to reach the marks resp. extinguishment before reaching the 2. mark	1. [s]	---	---	---	---	---
	2. [s]	---	---	---	---	---
Flames were quenched before reaching the 2. mark	[yes/no]					
Burning duration starting at the first mark	[s]	---	---	---	---	---
Burning distance starting at the first mark	[mm]	---	---	---	---	---
Burning rate	[mm/min]	---	---	---	---	---
Burning rate	Avg. [mm/min]	---				
	Max. [mm/min]	---				

Observations:

No ignition of the samples were observed.

6. Test equipment:

Test apparatus	PK 0015
Caliper gauge	MB 0029
Balance	MW 0007
Stop-watch	MU 0045

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7. Requirements:

Standard	Criteria	Classification
FMVSS 302 49 CFR 571.302	Max. burning rate \leq 102 mm/min	passed
	or The material stops burning before it has burned for 60 s from the first mark, and has not burned more than 51 mm from the first mark.	passed
SAE J369	The material does not support the combustion during or following the 15 s ignition period and does not transmit a flame front across either surface to the first scribed line.	DNI
	The material ignites on either surfaces, but the flame extinguishes itself before reaching the first scribed line.	SE/0
	The material stops burning before it has burned for 60 s from the start of timing, and has not burned more than 51 mm from the point where the timing was started.	SE/NBR
	When the leading flame front on either surface progresses beyond the first scribed line, but extinguishes itself before reaching the second scribed line, time and measure its progress to the furthest point where the burning stops and calculate and report the burn rate only if the burned distance exceeds 51 mm or the burn time is 60 s or greater.	SE/B
	The material burns the full 254 mm. The burning rate has to be calculated	B
	The material transmits a flame front across either surface more than 51 mm beyond the first scribed line at a rate too fast to measure accurately; therefore, no calculation is required.	RB
DIN 75 200, ISO 3795	This standard does not define any requirements	

Note: The FMVSS 302 test procedure is found almost identically in numerous group standards and testing procedures of vehicle manufacturers worldwide. With respect to the number of required individual tests and threshold values for pass-fail criteria, however, these guidelines may differ strongly from those given in FMVSS 302.

