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Testing, Advising, Assuring,

# Test report no. 2016-1287

for applying of a required "Verwendbarkeitsnachweis" issued 01.04.2016

Applicant:

Massivit 3D Printing Technologies Ltd. 11 Pesakh Lev Lod 7129361, Israel

Date of order:

13.03.2016

Date of sampling:

no official sampling of the specimen by a representative

of Exova Warringtonfire, Frankfurt

Date of arrival:

15.03.2016

Date of test:

30.03.2016

#### Order

Testing of the normal flammability (Building Class B2) according to DIN 4102-1 (May 1998)

## Description / designation of the test object

The samples are made of UV curable acrylic polymer

#### Description of the relevant test procedure

DIN 4102 part 1 (May 1998)

This test report does not replace the required "Verwendbarkeitsnachweis" (official approval document). It is only used for issuing the "Verwendbarkeitsnachweis".

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## 1. Description of the test material

#### 1.1 Details of the customer:

The samples are made of UV curable acrylic polymer

Sample thickness: 3.06 - 3.28 mm

Colour:

white

Intended end use of product:

Objects for indoor decoration

## 1.2 By Exova Warringtonfire, Frankfurt determined values:

Plastic

Colour:

transparent

Thickness:

3,3 mm

Sample weight:

3,461 kg/m<sup>2</sup>

The samples were stored 14 days before testing under climatic conditions (23°C / 50 % rel. humidity).



## 2. Test results

## 2.1 Normal flammability test according to DIN 4102-1

Test with edge ignition without deposit Flame application on: lower specimen edge

Length direction:

Specimen-no.								
		1	2	3	4	5		
Ignition point [s]		1	1	1	1	1		
Reaching the measuring mark (150 mm) within 20 seconds		no	no	no	no	no		
Self-extinguishing of the flame [s]		-	14	2	2	-		
Max. flame height	[mm]	60	60	60	60	60		
Time	[s]	20	20	20	20	20		
Afterflaming	[s]	-	-	-	12	-		
Afterglowing	[s]	_	_	-	-			
Flames extinguished after	[s]	25	25	25	25	25		
Smoke development (visuell impression)		strong smoke development						
Burning droplets up to 20 sec.		no	no	no	no	no		
Time	[s]	-	72			110		

Remarks: none

Cross direction:

Cross direction.								
Specimen-no.		1	2	3	4	5		
Ignition point [s] Reaching the measuring mark (150 mm) within 20 seconds		1	1	1	1	1		
		no	no	no	no	no		
Self-extinguishing of the flame [s]		-	-	120	-	_		
Max. flame height	[mm]	60	60	60	60	60		
Time	[s]	20	20	20	20	20		
Afterflaming	[s]		-	-	-	20		
Afterglowing	[s]	-	-	-		_		
Flames extinguished		25	25	25	25	25		
Smoke development (visuell impression)		strong smoke development						
Burning droplets up to 20 sec.		no	no	no	no	no		
Time	[s]	3+7	-		110	110		

Remarks: none



## Appearance of the specimen after the small burner test:





#### 3. Assessment

The material described in chapter one fulfils the requirements of the

#### **Building Class B2**

according to DIN 4102-1 (May 1998).

#### 4. Special note

The fire test result is only valid for the material described in chapter one in the tested colour and square weight in free hanging configuration.

The distance towards other plane materials has to be ≥ 40 mm.

In composition with other materials (e.g. coatings, deposits) the burning behaviour can be influenced unfavourably so that the above classification is not valid any longer.

According to DIN 4102-1, the burning behaviour in composition with other materials has to be tested separately.

This test report does not replace the required "Verwendbarkeitsnachweis". It is only used for its issue.

Frankfurt, the 01.04.2016

H. Anders
Tester in Charge

Dipl.-Ing. T. Zachäus Laboratory Supervisor

This Test report is valid until 29.03 2021

The results of the tests relate only to the behaviour of the test specimen which is designated on the top.

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