

TEST REPORT



REPORT NO. : HV-20-00687A

PAGE : 1 OF 4

REPORT DATE : Feb. 18, 2020

T AND L PLASTIC CORP.

No.17, LAN 57, TUNG-SWENG ST. SU-LIN AREA, NEW TAIPEI CITY, TAIWAN

Product Name: flame retardant PS sheet
Product Color: clear
Manufacturer: T AND L PLASTIC CORP
Product Submitted By: T AND L PLASTIC CORP
Date of Received: FEBRUARY 07, 2020
Date of Testing: FEBRUARY 07, 2020~FEBRUARY 18, 2020
Remark: 1.The information mentioned in the above section is provided by Client (Exclude Date of Sample Received and Date of Testing)
2.The following report content marks # is provided by Client

=====
The laboratory tests according to the test requests and samples provided by client, and the results are as follows:

Test Required : Flammability Test

Test Method : Please see attached sheets

Test Result : Please see attached sheets

Remark: Test location is the same as the laboratory address.

----- 1 -----

The value of required specifications are for reference only.
Conformity judgement is the Applicant's final verdict.

**Signed for and on behalf of
SGS Taiwan Ltd.**

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Flammability Test

Test Equipment :

Name	Brand	Model
150 mm Digimatic Caliper	MITUTOYO	500-196-30
Horizon Vertical Flame Chamber	ATLAS	HVUL2

Test Method :

Ref. to UL94 (2013) Test for Flammability of Plastic Materials for Parts in Devices and Appliances

Test Condition :

Conditioning 1 : Specimens are to be preconditioned at $23\pm 2^{\circ}\text{C}$ and $50\pm 5\%$ relative humidity for 48 hours

Conditioning 2 : Specimens are to be preconditioned in an air-circulating oven for 168 hours at $70\pm 2^{\circ}\text{C}$ and then cooled in the desiccator for at least 4 hours at room temperature

----- 2 -----

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Test Data :

Conditioning 1(Temperature 23±2°C, Relative humidity 50±5%, 48 hours)

Criteria conditions	Specimen					#Requirements		
	1	2	3	4	5	V-0	V-1	V-2
Thickness(mm)	2.21	2.22	2.21	2.21	2.19	-	-	-
Afterflame time for each individual specimen t1(Sec)	1.5	1.6	9.5	0.8	1.2	≤ 10	≤ 30	≤ 30
Afterflame time for each individual specimen t2(Sec)	1.2	1.1	1.0	1.0	0.9	≤ 10	≤ 30	≤ 30
Total afterflame time (Sec) (t1 plus t2 for the 5 specimens)	19.8					≤ 50	≤ 250	≤ 250
Afterflame plus afterglow time for each individual specimen after the second flame application(t2+t3) (Sec)	1.2	1.1	1.0	1.0	0.9	≤ 30	≤ 60	≤ 60
Afterflame or afterglow of any specimen up to the holding clamp	No	No	No	No	No	No	No	No
Cotton indicator ignited by flaming particles or drops	Yes	Yes	Yes	Yes	Yes	No	No	Yes

Conditioning 2(Temperature 70±2°C, 168 hours, Cooled 4 hours at room temperature)

Criteria conditions	Specimen					#Requirements		
	1	2	3	4	5	V-0	V-1	V-2
Thickness(mm)	2.18	2.19	2.21	2.17	2.22	-	-	-
Afterflame time for each individual specimen t1(Sec)	2.4	4.2	17.7	1.0	1.4	≤ 10	≤ 30	≤ 30
Afterflame time for each individual specimen t2(Sec)	5.6	1.1	1.4	1.0	0.9	≤ 10	≤ 30	≤ 30
Total afterflame time (Sec) (t1 plus t2 for the 5 specimens)	36.7					≤ 50	≤ 250	≤ 250
Afterflame plus afterglow time for each individual specimen after the second flame application(t2+t3) (Sec)	5.6	1.1	1.1	1.0	0.9	≤ 30	≤ 60	≤ 60
Afterflame or afterglow of any specimen up to the holding clamp	No	No	No	No	No	No	No	No
Cotton indicator ignited by flaming particles or drops	Yes	Yes	Yes	Yes	Yes	No	No	Yes

Test Result :

Test data is compliant with the V-2 requirements of UL 94 20mm Vertical Burning Test.

----- 3 -----

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Material and Engineering Laboratory-Taipei

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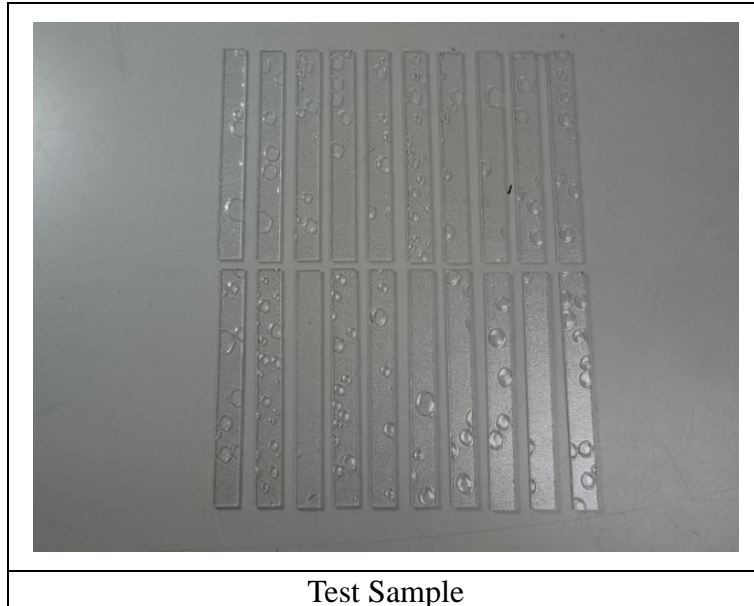


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Sample Photo :



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