

LOTTE Chemical Corporation

TEST REPORT

SCOPE OF WORK

Acrylic Solid Surface_PT(Chip)

REPORT NUMBER

240910002SHF-001

TEST DATE(S)

2024-09-10 - 2024-09-26

ORIGINAL ISSUE DATE

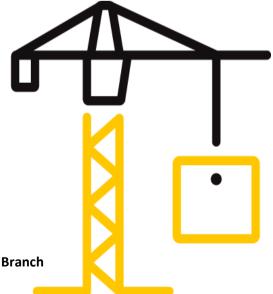
2024-09-27

PAGES

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DOCUMENT CONTROL NUMBER

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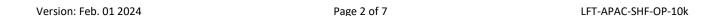
Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch
Plant 5, No. 6958 Daye Road, Fengxian District, Shanghai, China
Tel: +86 21-61136116 Fax: 021-61189921

Website: www.intertek.com

Test Report

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Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch Plant 5, No. 6958 Daye Road, Fengxian District, Shanghai, China Tel: +86 21-61136116 Fax: 021-61189921

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Test Report

Original Issue Date: 2024-09-27 Intertek Report No. 240910002SHF-001

Applicant: LOTTE Chemical Corporation

Address: 56, Gosan-ro, Uiwang-si, Gyeonggi-do, Republic of Korea

Attn: Kyungho Song

Test Type: Performance test, samples provided by the applicant.

Product Information

| Product Name | Model | Specification | |
|--|---------------|----------------------|--|
| Acrylic Solid Surface_PT(Chip) | Staron | 12mm | |
| Sample ID | Sample Amount | Sample Received Date | |
| S240910002SHF.001~002 | 1 box | 2024-08-26 | |
| Sample Description | | | |
| Thickness 12mm, see sample photo in Appendix A | | | |

Test Methods And Standards

| Test Standard | EN 13823:2020+A1:2022 and EN ISO 11925-2:2020 | | | |
|---------------------------|--|--|--|--|
| Specification Standard | EN 13501-1:2018 | | | |
| Test Conclusion | The samples were tested according to the above standards, and the results are shown in the following page. | | | |

Note:

1. This report does not involve sampling. The report only reflects conformity of the tested items of the samples provided by the testing applicant. Representativeness and authenticity of the submitted samples are responsibilities of the testing applicant.

Report Authorized

Name: Sally Xie

Title: Reviewer

Version: Feb. 01 2024

Project Engineer

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Original Issue Date: 2024-09-27 Intertek Report No. 240910002SHF-001

Test Items, Method and Results:

EN 13501-1:2018 Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests

1.1 SINGLE BURNING ITEM TEST

The test was conducted in accordance with EN 13823. This test evaluates the potential contribution of a product to the development of a fire, under a fire situation simulating a single burning item in a room corner near to the product.

1.2 IGNITABILITY TEST

The test was conducted in accordance with EN ISO 11925-2. This test evaluates the ignitability of a product under exposure to a small flame.

1.3 CLASSIFICATION CRITERIA

The classification was determined in accordance with EN 13501-1:2018. The class B with its corresponding fire performance is given in the table below.

Table - Classes of reaction to fire performance for construction products excluding floorings and linear pipe thermal insulation products.

| Class | Test Method(s) | Classification criteria | Additional classifications |
|-------|--|--|--|
| В | EN 13823 and | FIGRA _{0.2MJ} \leq 120 W/s and LFS < edge of specimen and THR _{600s} \leq 7.5 MJ | Smoke production ^a and Flaming droplets/particles ^b |
| | EN ISO 11925-2 ^c Exposure = 30 s | $F_S \le 150 \text{ mm within } 60 \text{ s}$ | — Flaming dropiets/particles |

Note:

a. $s1 = SMOGRA \le 30m^2/s^2$ and $TSP_{600s} \le 50m^2$; $s2 = SMOGRA \le 180m^2/s^2$ and $TSP_{600s} \le 200m^2$; s3 = not s1 or s2 b. d0 = No flaming droplets/particles in EN 13823 within 600s;

d1 = no flaming droplets/particles persisting longer than 10s in EN 13823 within 600s; d2 = not d0 or d1.

Ignition of the paper in EN ISO 11925-2 results in a d2 classification.

c. Under conditions of surface flame attack and, if appropriate to the end use application of the product, edge flame attack.



Original Issue Date: 2024-09-27 Intertek Report No. 240910002SHF-001

Test Items, Method and Results:

2 RESULTS AND OBSERATIONS

| Method | Parameter | Result | | |
|--|---|--|--|--|
| | FIGRA _{0.2MJ} , W/s | 35.2 | | |
| | THR _{600s} , MJ | 5.19 | | |
| | LFS, m | <edge of="" specimen<="" td=""></edge> | | |
| EN 13823:2020+A1:2022 | SMOGRA, m²/s² | 0 | | |
| | TSP _{600s} , m ² | 9.48 | | |
| | Flaming Droplets/Particles | No flaming droplets/particles occur within 600s | | |
| EN ISO 11925-2:2020 Exposure = 30 s | $F_S \le 150 \text{ mm within } 60 \text{ s}$ | Yes | | |
| | Ignition of the paper | No | | |

Note

1. Per EN 13823, the samples were free standing at a distance of 80mm from the backing board. Backing board was a 15mm thick calcium silicate board. The density of the calcium silicate board was 850kg/m^3 .

3 CLASSIFICATION

The classification has been carried out in accordance with EN 13501-1.

| Fire behaviour | | Smoke production | | | Flaming droplet | |
|----------------|---|------------------|---|---|-----------------|---|
| В | - | S | 1 | 1 | d | 0 |

Reaction to fire classification: B- s1, d0



Original Issue Date: 2024-09-27

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Test Items, Method and Results:

4 Test Photos of EN 13823



Before test (Long wing)



After test (Long wing)



Before test (Short wing)



After test (Short wing)



Original Issue Date: 2024-09-27 Intertek Report No. 240910002SHF-001

Appendix A: Sample Received Photo



Front view (test side)



Back view

Revision:

| NO. | Date | Changes |
|------------------|------------|-------------|
| 240910002SHF-001 | 2024-09-27 | First issue |