

# Report of the classification of the reaction to fire behaviour

**No. 230010207-3**

**issued 06.11.2015**

**English version**

**Sponsor** -  
Hanita Europa GmbH  
Kupferstr. 1

65428 Rüsselsheim  
GERMANY

## **Order**

Reaction to fire classification according to DIN EN 13501-1

## **Date of order:**

25.08.2015

## **Name of the classified building product:**

Sunprotection films with the general designation „SolarZone“

For detailed product designations see annex 1.

This report determines the classification of the above-mentioned building product in accordance with the method specified in DIN EN 13501-1 “Classification of building products and building types with regard to their reaction to fire – part 1: classification with results from tests with regard to the reaction to fire of building products; German version EN 13501-1:2007+A1:2009”, Edition 2010.

**1. Description of the building product**

Self-adhesive films made of polyester with varying degrees of light transmission for flat glass.

Thickness range: 49 µm to 100 µm

Weight per unit area: approx. 90 g/m<sup>2</sup> to approx. 144 g/m<sup>2</sup>

**2. Test reports and test results which form the basis of the classification**

2.1 Test reports

| Name of the laboratory | Sponsor  | Number of the test reports   | Test method        |
|------------------------|--|------------------------------|--------------------|
| MPA NRW                | Hanita Europa GmbH<br>Kupferstr. 1<br>65428 Rüsselsheim<br>GERMANY | 230010207-1<br>of 06.11.2015 | DIN EN 13823       |
| MPA NRW                | Hanita Europa GmbH<br>Kupferstr. 1<br>65428 Rüsselsheim<br>GERMANY | 230010207-2<br>of 06.11.2015 | DIN EN ISO 11925-2 |

2.2 Test results

| Test method  | Number of tests | Parameter                             | Test results                        |                    |
|--------------|-----------------|---------------------------------------|-------------------------------------|--------------------|
|              |                 |                                       | Continuous parameter average values | Discrete parameter |
| DIN EN 13823 | 4               | FIGRA <sub>0,2</sub> (W/s)            | 0.0                                 | --                 |
|              |                 | FIGRA <sub>0,4</sub> (W/s)            | 0.0                                 | --                 |
|              |                 | THR <sub>600s</sub> (MJ)              | 0.5                                 | --                 |
|              |                 | LFS < outer edge                      | --                                  | yes                |
|              |                 | SMOGRA (m <sup>2</sup> /s)            | 0,0                                 | --                 |
|              |                 | TSP <sub>600s</sub> (m <sup>2</sup> ) | 28.3                                | --                 |
|              |                 | Flaming droplets / particles (s)      | 0                                   | --                 |

| Test method        | Number of tests       | Parameter   | Test results                        |                    |
|--------------------|-----------------------|---|-------------------------------------|--------------------|
|                    |                       |   | Continuous parameter average values | Discrete parameter |
| DIN EN ISO 11925-2 | 8 x K<br>and<br>8 x F | F <sub>s</sub> ≤ 150 mm<br>Flaming droplets / particles | --<br>--                            | yes<br>no          |

Remark: K = Tested with flames exposed to the edge, F = tested with flames exposed to the surface

### 3. Classification and direct field of application

#### 3.1 Reference

The classification was carried out in accordance with clauses 11 and 14.1 of the standard DIN EN 13501-1: 2010.

#### 3.2 Classification

The classification assigned to the material with regard to its reaction to fire is: **B**

The additional classification with regard to smoke production is: **s1**

The additional classification with regard to flaming droplets / particles is: **d0**

This results in the following reaction to fire classification of the material:

| Reaction to fire | Smoke production | Flaming droplets/particles |
|------------------|------------------|----------------------------|
| <b>B</b>         | <b>s1</b>        | <b>d0</b>                  |

i.e. **B – s1, d0**

#### 3.3 Field of application of the product

The classification is solely valid for the products described in clause 1, glued onto substrates of glass. Furthermore, the classification is only valid when the receipt of the products is identical to the products which were tested in the tests that form the basis of the classification.

### 4. Restrictions

This classification report does not replace any type approval or certification of the product.

This classification report written in English language is issued additionally to the report written in German language with the same report number. In case of doubt the German version is solely valid.

Erwitte, 06.11.2015

Im Auftrag



Dipl.-Ing. Rademacher

Leiter der Prüfstelle



Date of issue of this English version: 10 November 2015

The following products are covered by the classification specified in classification report no. 230010207-3 of 06.11.2015 due to their thickness and their weight per unit area as well as their composition.

- OptiTune 05 (Item-no. R070R0W)
- OptiTune 15 (Item-no. R070R1W)
- OptiTune 22 (Item-no. R070R2W)
- OptiTune 30 (Item-no. R070R3W)
- OptiTune 40 (Item-no. R070R4W)
- Titan Duo 05 (Item-no. R058W0S)
- Titan Duo 15 (Item-no. R058W1S)
- PerLite 20 (Item-no. R070L6W)
- PerLite 35 (Item-no. R070L5W)
- PerLite 50 (Item-no. R070L3W)
- PerLite 70 (Item-no. R070L4W)
- Silver 20 (Item-no. R06922W bzw. R05822S)
- Silver 35 (Item-no. R06934W bzw. R05834S)
- Silver 50 (Item-no. R05850S)
- Silver Matte (Item-no. R06920)
- Solar Bronze 20 (Item-no. R069B6W bzw. R069B6S)
- Solar Bronze 35 (Item-no. R069B5W bzw. R069B5S)
- Silver 20 Low-E (Item-no. R06922E)
- Silver 35 Low-E (Item-no. R06934E)
- e-Lite 45 (Item-no., R081I4W bzw. R081IS4)
- e-Lite 70 (Item-no. R081ISW bzw. R081IS7)
- Matte 2 Mil (Item-no. R07311)
- UV Filter Film 2 Mil (Item-no. R069UVS)
- Silver 20 Xtra (Item-no. R07022X)
- Silver 35 Xtra (Item-no. R07035X)
- Silver 50 Xtra (Item-no. R07050X)
- PolyZone Silver 20 Xtra (Item-no. R0705XP)
- Silver Matte 20 Xtra (Item-no. R108SMX)
- Solar Bronze 20 Xtra (Item-no. R069B2X)
- Solar Bronze 35 Xtra (Item-no. R069B5X)
- Titan 07 Xtra (Item-no. R070W0X)
- Titan 20 Xtra (Item-no. R070W6X)
- Titan 35 Xtra (Item-no. R070W5X)
- Titan 50 Xtra (Item-no. R070W3X)
- OptiLite 75 Xtra (Item-no. R09275X)
- e-Lite 70 Xtra (Item-no. R105I7X)
- SolarZoneXTRM Silver 20X (Item-no. R12219X)
- SolarZoneXTRM Silver 35X (Item-no. R12235X)
- SolarZoneXTRM Titan 07 (Item-no. R122W0X)
- SolarZoneXTRM Titan 20 (Item-no. R122W6X)
- SolarZoneXTRM Titan 35 (Item-no. R122W5X)
- SolarZone XTRM SkyLite S 20 X (Item-no. R157X15)
- SolarZone XTRM PolyZone SkyLite S 20 X (Item-no. R157X5P)

Notice: The details to the thickness, to the weight per unit area and to the composition of the above-mentioned products have not been checked by the testing laboratory. The compliance with the specific details specified in clause 1 in the classification report is decisive for the classification.

**Date of issue of this annex: 10.11.2015**