

## Product Data Sheet Trespa HPL Panels

### Preface

This Product Data Sheet (hereinafter the “**Data Sheet**”) describes the composition of decorative high-pressure compact laminates (HPL) of Trespa International B.V. (hereinafter “**Trespa HPL Panels**”) and gives general information on transport, handling, storage, processing, maintenance, environment and technical data of Trespa HPL Panels. It covers all Trespa HPL Panels insofar the HPL grades are described in the European Standard EN 438. All data in this HPL Product Data Sheet are related to the following product lines: Trespa Meteon, Trespa Virtuon, Trespa Toplab<sup>PLUS</sup> and Trespa Athlon.

Trespa HPL Panels are not classified as hazardous substances. A special marking and a material safety data sheet (MSDS) is not required.

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### 1. Description

Trespa HPL Panels are decorative high-pressure compact laminates (HPL) according to the European Standard EN 438 and to ISO 4586.

Trespa HPL Panels are sheets consisting of layers of wood-based fibres impregnated with thermosetting resins and decorative surface layer(s) bonded together in a high pressure process. The process, defined as a simultaneous application of heat ( $\geq 150\text{ }^{\circ}\text{C}$  /  $\geq 302\text{ }^{\circ}\text{F}$ ) and high specific pressure ( $\geq 7\text{ MPa}$ ), provides flowing and subsequent curing of the thermosetting resins to obtain a homogenous non-porous material with increased density ( $\geq 1,35\text{ g/cm}^3$ ) and required surface finish.

Approximately 70 % of Trespa HPL Panels consist of fibres that originate from paper and/or wood and approximately 30 % consist of cured phenol-formaldehyde resin for core layers. The surface layer consists of an Electron Beam Cured (EBC) acrylic urethane coating for Trespa Meteon, Trespa Virtuon and Trespa Toplab<sup>PLUS</sup> or a melamine based resin for Trespa Athlon.

All resins belonging to the group of thermosetting resins are irreversibly interreacted through cross linked chemical bonds formed during the curing process producing a non-reactive, stable material with specific characteristics.

Trespa HPL Panels are supplied in a variety of sizes, thicknesses, colours, designs, surface finishes and textures.



## **2. Storage and Transport**

For transport, Trespa HPL Panels are classified as a non-hazardous product therefore no special labelling is required.

Storage and transportation of Trespa HPL Panels should be carried out in accordance with Trespa's approved guidelines on transport, handling and storage.

## **3. Handling and Machining**

Safety requirements of fabrication and machining should be observed at all times, including but not limited to requirements with regard to handling, machining, dust extraction, dust collection and fire precautions.

Because of the possibility of sharp edges, protective gloves should always be worn when handling laminates.

The contact with fine dust from Trespa HPL panels may cause problems in case of sensitivity or allergies when machining.

Handling and machining of Trespa HPL Panels should be carried out in accordance with Trespa's approved guidelines on Machining.

## **4. Environmental and Health Aspects in Use**

Decorative high-pressure compact laminates are cured and chemically inert.

The formaldehyde emission level is below the limit for wood based materials. Due to the very low permeability of Trespa HPL Panels, HPL Panels bonded to wood based substrates, act as a barrier against possible formaldehyde emissions coming from the wood substrates.

In view of its specific properties, Trespa HPL panels are approved for contact with foodstuffs in conformity with the European Standard EN 1186.

For cleaning, nonabrasive household cleaning agents and even organic solvents can be use in accordance with Trespa's approved cleaning methods.

The non-porous surface and edges are easy to disinfect with hot water, steam and common types of disinfectants used in hospitals and other commercial facilities. Trespa HPL Panels have been used for many years in applications where cleanliness and hygiene are very important.

The Trespa HPL panel is an article and not a chemical substance and therefore the REACH legislation does not apply.

## **5. Maintenance**

Trespa HPL panels do not suffer from corrosion and oxidation and do not need further surface protection (lacquers or paints).

## **6. Regulations and Requirements**

Each country has its own building regulations and other requirements, including but not limited to regulations and requirements in respect of fire safety, that customers and/or contractors (including architects) independently need to check to ensure fulfillment of all regulations and requirements and to ensure the correct product choice.

## 7. Trespa HPL panels in Fire Situations

The requirements for reaction to fire are determined by the fire regulations of the country in which the material is to be used.

In Europe, the reaction-to-fire of construction products is classified in accordance with EN 13501-1.

For applications other than construction, fire test methods and performance requirements may vary from one country to another, and it is not possible, with any test, to predict compliance with all national and other requirements.

Trespa HPL Panels exist in two different grades; Standard grade or Fire Retardant grade.

The Fire Retardant grade panels are treated with an additive that does not contain halogens, preservatives or heavy metals. This treatment generally contributes to a better fire retarding performance.

Due to incomplete burning, as with many organic materials, hazardous substances are to be found in the smoke. However, Trespa HPL Panels are capable of meeting the best performance for organic surfacing materials as required in the French standard NF F 16101 (= at least class F2 for smoke density and toxicity).

Trespa HPL Panels require the same fire fighting techniques as with other wood based building materials.

## 8. Energy Recovery

On account of their high calorific value (18 - 22 MJ/kg), Trespa HPL Panels are suitable for thermal recycling in approved industrial incinerators. When burnt completely at 700 °C, Trespa HPL Panels will amongst other chemicals, produce mainly water, carbon dioxide and oxides of nitrogen.

## 9. Waste Disposal

In most countries, Trespa HPL Panels can be brought to controlled waste disposal sites. Waste material should be handled in accordance with national and/or local disposal regulations

## 10. Technical Data of Trespa HPL Panels

### Physical/chemical characteristics

Physical state	Solid sheets
Density	≥ 1,35 g/cm <sup>3</sup>
Boiling point	None
Evaporation rate	None
Melting point	No melting
Calorific value	18 - 22 MJ/kg

## Stability and reactivity data

Stability	Stable; not considered to be reactive or corrosive.
Hazardous reactions	None
Material incompatibility	Strong acids or alkaline solutions will stain the decorative surface.

## Fire and explosion data

Ignition temperature	Approx. 400 °C
Flash point	None
Thermal decomposition	Possible above 250 °C. Depending on the burning conditions (temperature, amount of oxygen, etc.) toxic gases may be emitted, e. g. carbon monoxide, carbon dioxide, ammonia.
Smoke and Toxicity	Classified at least F2 when tested according NF F 16 101.
Flammability	Will burn only in a fire situation, in presence of open flames.
Extinguishing media	Considered class A material. Carbon dioxide, water spray, dry chemical foam can be used to extinguish flames. Water dampens and prevents rekindling. Persons in fire situations should wear self-breathing apparatus and fire protective clothing.
Explosion hazards	Machining, sawing, sanding and routing produce class ST-1 dust. Safety precautions and adequate ventilation must be observed to avoid airborne dust concentration.
Protection against explosion and fire	To be treated as wood based materials.

## Health & safety

Electrostatic behaviors (only applicable for Trespa Athlon)	HPL minimizes the generation of charge by contact-separation or rubbing with another material. No need to be earthed. Surface resistivity is between $10^9 - 10^{12}$ ohms and a chargeability of $V < 2$ kV according to CEI IEC 61340-4-1 so that HPL are considered as antistatic material.
Disposal considerations	Waste material should be handled in accordance with national and/or local disposal regulations.
Health information	Not considered to be dangerous for humans and animals. No evidence of toxicological effects and eco-toxicity. Physiologically safe and approved for use in contact with foodstuffs according to EN 1186



Working areas	General dust regulations applicable.
Formaldehyde emission	European class E1 - tested according to EN 717-2: $\leq 3.5 \text{ mg/m}^2 \text{ h}$ - tested according to EN 717-1 (WKI chamber method): $\leq 0.13 \text{ mg/m}^3 \text{ air}$

### Other characteristics

Storage and transport	Classified as non-hazardous for transportation purposes (REACH).
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