

# General technical information

switch from waste to QUALITY products





#### material

100% high quality recycled plastic residue, mainly from the nutrition and packaging industry

Composition: LDPE (Low Density Polyethylene) HDPE (High Density Polyethylene) PP (Polypropylene)

#### production \_

The different plastics are grounded, mixed and fused together under high temperatures and pressed into moulds. During production, the material is mass coloured in order to obtain a homogenous colour.



## finish & look \_\_\_

STANDARD: the surface is knot free, evenly coloured throughout and shows a faced, slightly shining structure.

IMPRESS: the material has a non removable wood grain surface

BASIC : the material and its surface are rougher than the standard and impress finish.



## available colours

Govaplast	Govaplast Horse	Govaplast Home +	Govaplast Street	Govaplast Play
Ural Black	Ural Black	Ural Black	Ural Black	Quartz Brown
Quartz Brown	Quartz Brown	Quartz Brown	Quartz Brown	Sand Beige
Canyon Brown	Canyon Brown	Sand Beige	Sand Beige	Andes Green
Sand Beige	Sand Beige	Atlas Beige	Mineral Grey	
Atlas Beige	Atlas Beige	Mineral Grey	Andes Green	Govaplast Technic
Mineral Grey	Mineral Grey	Ash Grey		Ural Black
Ash Grey	Ash Grey			
Andes Green	Andes Green			



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In products made of recycled plastic, tolerances of about 2% on the measurements are possible.

# workability \_\_\_\_\_

Comparable to wood: screwing, nailing, sawing, drilling, planing, milling, stapling etc. The product may bend when cut lengthwise.

**Recommendations:** drill at low speed

rough-drill before screwing

preferably saw with a circular saw (WIDIA)

## properties \_

quality reclaimed	born to be outdoor	everlasting appearance	stronger than ever
100% plastic waste	Weatherproof	Maintenance free	Flexible
Completely recyclable	UV resistant	Graffiti resistant	Easy to process
Coloured throughout	Non absorbing	Natural texture	Splinter-free
Solid core	Non slip material	Rot-proof	Impact resistant
	Everlasting	Removable scratches	



## Results screw extraction test:

screw dimensions: 4 x 50 mm

drawing speed 10 mm / min (no predrilled holes)

test with 5 screws

Tensile force average 4365 N +/- 14% deviation

## 1. Tensile test according to ISO 527-2 (2012)

modulus	719	MPa
yield	7,8	MPa
tensile strenght	17,2	MPa
stretch at break	478	%

## 2. Flexural test according to ISO 178 (2010)

modulus	572	MPa
yield	9,0	MPa
tensile strength	15,7	MPa
stretch at 16mm	6	%

3.	. Hardness measurement according to ISO 2039-2	32.09 HB

4. Impact according to ISO 179-1 (2000) notched	65,6 kJ/m <sup>2</sup>
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5. a. Vicat temperature according to ISO 306/A50	115,20 °C
b. MFI according to ISO1133 (2005)	

6. Liquid absorption according to ISO 62 0,29 %

**7. Density according to ISO 1183-1 (2004)** 0,960 g/cm<sup>3</sup>

**8. Linear expansion coefficient** 0,109 mm/m/°C

## 9. Flamability tests

according to DIN 4102 part 1	fire class B2
according to EN ISO 13501-1: 2007+A1:2009	fire class E <sub>a</sub>

## 10. Slip resistance decking boards

according to EN 1341 pendulum test (dry) in PTV *	86 - 96
according to EN 1341 pendulum test (wet) in PTV *	29 - 47
* PTV 25-35 = moderate slip potential	
* PTV 36+ = low slip potential	
according to DIN 51130 ramp test (wet) R-classification	R10

## 11. Pressure test

from 1700 N/cm <sup>2</sup>	light pressure
from 3100 N/cm <sup>2</sup>	impression
from 6300 N/cm <sup>2</sup>	no more resistance



liquid bleach chemical substance

results

commercial product	chemical substance	results
liquid bleach	NaOCI (min. 36°)	no discolouration or modification
lubricating oil	synthetic engine oil	no discolouration or modification
salad oil	corn oil	no discolouration or modification
degreaser	acetone butanone tetracloroethylene diluted sulphuric acid diluted soda	no discolouration or modification
pool water	saturated solution of trichloro isocyanic acid	no discolouration or modification
white spirit	mixture of aliphatic hydrocarbons	no discolouration or modification
moss killer	saturated solution of iron sulphate and disodium - EDTA	no discolouration or modification
fat	heated deep-frying fatl at 180°C	Slight discolouration because of superficial melting of the plastic.  Remark: Test with boiling oil. In the real situation oil splashes are not 180°C when they reach the boards.

test temperature : 20° C (room temperature)

test duration: 24 hours

visual test

tests executed with concentrated or less diluted solutions than available in retail

#### Notes:



<sup>1.</sup> Apart from extensive internal research, the material was tested by: Hogeschool Gent, University Gent (CPMT), UGent, DMT (Fachstelle für Brandschutz), FGK (Forschungsinstitu für anorganische Werkstoffe, Glas/Keramik), Geos (constructive testing), VKC (Vlaams Kunststof Centrum)

<sup>2.</sup> These test results are referring to the tested objects only. The detailed test reports can be requested for inspection.