

Article

Art.-No.	Article	Dimension	Color
0.0.473.05	Plastic 4mm	panel dimension approx. 2800x1850 mm	white similar RAL 9016
0.0.473.04		cut-off max. 2770x1820 mm	
0.0.473.12	Plastic 4mm	panel dimension approx. 2800x1850 mm	black similar RAL 9017
0.0.474.37		cut-off max. 2770x1820 mm	
0.0.689.58	Plastic 4mm	panel dimension approx. 2800x1850 mm	green similar RAL 6011
0.0.689.59		cut-off max. 2770x1820 mm	
0.0.457.33	Plastic 4mm	panel dimension approx. 2800x1850 mm	red similar RAL 3000
0.0.428.43		cut-off max. 2770x1820 mm	
0.0.688.26	Plastic 4mm	panel dimension approx. 2800x1850 mm	yellow similar RAL 1003
0.0.688.27		cut-off max. 2770x1820 mm	
0.0.688.28	Plastic 4mm	panel dimension approx. 2800x1850 mm	blue similar RAL 5014
0.0.688.29		cut-off max. 2770x1820 mm	
0.0.720.09	Plastic 4mm	panel dimension approx. 2800x1850 mm	anthracite similar RAL 7016
0.0.720.10		cut-off max. 2770x1820 mm	
0.0.457.30	Plastic 4mm	panel dimension approx. 2800x1850 mm	grey similar RAL 7030
0.0.428.47		cut-off max. 2770x1820 mm	
0.0.457.29	Plastic 4mm	panel dimension approx. 2800x1850 mm	grey similar RAL 7035
0.0.428.46		cut-off max. 2770x1820 mm	
0.0.614.86	Plastic 4mm ESD	panel dimension approx. 2440x1220 mm	grey similar RAL 7035
0.0.614.85		cut-off max. 2410x1190 mm	
0.0.685.73	Plastic 6mm	panel dimension approx. 2800x2070 mm	white all-round similar to RAL 9003
0.0.687.83		cut-off max. 2770x2040 mm	
0.0.473.07	Plastic 10mm	panel dimension approx. 2800x1850 mm	white similar RAL 9016
0.0.473.06		cut-off max. 2770x1820 mm	
0.0.473.16	Plastic 10mm	panel dimension approx. 2800x1850 mm	black similar RAL 9017
0.0.474.36		cut-off max. 2770x1820 mm	
0.0.689.60	Plastic 10mm	panel dimension approx. 2800x1850 mm	green similar RAL 6011
0.0.689.61		cut-off max. 2770x1820 mm	
0.0.457.26	Plastic 10mm	panel dimension approx. 2800x1850 mm	red similar RAL 3000
0.0.428.89		cut-off max. 2770x1820 mm	
0.0.688.30	Plastic 10mm	panel dimension approx. 2800x1850 mm	yellow similar RAL 1003
0.0.688.31		cut-off max. 2770x1820 mm	

0.0.688.32	Plastic 10mm	panel dimension approx. 2800x1850 mm	blue similar RAL 5014
0.0.688.33		cut-off max. 2770x1820 mm	
0.0.720.11	Plastic 10mm	panel dimension approx. 2800x1850 mm	anthracite similar RAL 7016
0.0.720.12		cut-off max. 2770x1820 mm	
0.0.457.24	Plastic 10mm	panel dimension approx. 2800x1850 mm	grey similar RAL 7030
0.0.428.93		cut-off max. 2770x1820 mm	
0.0.457.25	Plastic 10mm	panel dimension approx. 2800x1850 mm	grey similar RAL 7035
0.0.428.92		cut-off max. 2770x1820 mm	
0.0.614.88	Plastic 10mm ESD	panel dimension approx. 2440x1220 mm	grey similar RAL 7035
0.0.614.87		cut-off max. 2410x1190 mm	
0.0.487.64	Plastic 16mm ESD	panel dimension approx. 2440x1220 mm	grey similar RAL 7035
0.0.487.65		cut-off max. 2410x1190 mm	

Common Properties

Properties	Unit	Values	Standard
Material	-	Resin-bonded cellulose laminate	-
Density	g/cm ³	≥ 1.35	DIN EN ISO 1183
Thickness t	mm	4/10/16	-
Thickness Tolerance	mm	± 0.3 (t=4mm) ± 0.5 (t=6mm, t=10mm) ± 0.7 (t=16mm)	DIN EN 438-4:2016

Mechanical Properties

Properties	Unit	Values	Standard
Modulus of elasticity	MPa	≥ 9000	DIN EN ISO 178
Bending Strength	MPa	≥ 80	DIN EN ISO 178
behaviour subjected to abrasion	min ⁻¹	150	DIN EN 438, Pkt. 10
behaviour subjected to scratching	Grade	3	DIN EN 438, Pkt. 25

Thermal Properties

Properties	Unit	Values	Standard
Resistance to dry heat (160°C)	Grade	≥ 4	DIN EN 438-2, chapter 16
Linear thermal coefficient of expansion	10 ⁻⁶ x K ⁻¹	20	ISO 7991
Thermal conductivity	W/mK	0.3	DIN EN ISO 22007-1
Tension cracking susceptibility at 80 °C	Grade	4	DIN EN 438-2, chapter 24

Optical properties

Properties	Unit	Values	Standard
Lightfastness	Gray scale	4	DIN EN 438-2

Electrical Properties

Properties	Unit	Values	Standard
Surface resistance*	Ω	10 ⁹ - 10 ¹²	IEC 61340-5-1
		< 10 ⁹ (ESD)	IEC 61340-5-1
Volume resistance*	Ω	< 10 ⁹ (ESD)	IEC 61340-5-1

* Ambient temperature 23 °C ± 2 °C

The humidity during the tests was between 10-65% due to the local conditions..

Flame Characteristics

Properties	Unit	Values	Standard
Flame Class Rating	Euroclass	D-s2, d0	DIN EN 13501-1
	Building material class	B2	DIN 4102

Handling and storage

Properties	
Handling	The product can be processed with standard machines and tools.
Recommended storage	Horizontal, dry, protected for climatic condition.

Disposal

Basically, the country-specific laws and regulations regarding waste disposal must be observed.

Cleaning

Clean the surface with hot water and a soft cloth or sponge. Use a non-abrasive soap solution for heavier soiling. Organic solvents (e.g. acetone, alcohol, turpentine) can also be used. Test cleaning agent in an inconspicuous place before use. Finally, wash off with pure hot water and dry with an absorbent cloth.

REACH, RoHS

Properties	
Regulation (EG) Nr. 1907/2006 (REACH)	compliant
Regulation 2011/65/EU (RoHS) inkl. EU 2015/863	compliant
silicone	Silicon is not relevant for production, however, minimal contact with silicone-containing lubricants or cleaning agents cannot be completely ruled out when handling and producing our products.

The above information is based on the current state of our knowledge and does not represent an assurance of properties. The recipient of the product is responsible for observing existing laws and regulations.

Subject to technical changes, errors excepted.

No damage

item Plastics are resistant against the following substances and agents. These elements do not have an impact on the surface area of item Plastics, even after prolonged exposure (16 hours).

A

Acetic Acid Acetone

Acetone

Acetone

Active charcoal

Alcohol

Alcohol, beverages

Alcohol, primary

secondary

tertiary

Aldehyde

Alum liquor

Aluminium chloride

Aluminium sulphate

Aluminium potassium sulphate

Amides

Amines, primary

secondary

tertiary

Ammonia

Ammonium chloride

Ammonium sulphate

Ammonium sulphate

Amyl acetate

Amyl alcohol

Aniline

Animal fat

Animal fodder

Arabinose

Ascorbic acid

Asparagine

Aspartic acid

p-Aminoacetophenon

B

Baker's yeast

Barium chloride

Barium sulphate

Benzaldehyde

Benzene

Benzidine

Benzoic acid

Biogel

Blood

Boric acid

Butylacetate

Butyl alcohol

C

Cadmium acetate

Cadmium sulphate

Caffeine

Calcium carbonate (lime)

Calcium chloride

Calcium hydroxide

Calcium nitrate

Cane sugar

Carbolic acid

Carbolic acid - xylene

Carbon tetrachloride

Casein

Castor oil

Cedarwood oil (concentrated)

Cement

Chloral hydrate

Chlorobenzene

Chloroform

Cholesterol

Citric acid

Clay

Coal

Cocaine

Coffee

Common salt

Copper sulphate

Cosmetics

Cresol

Cresylic acid

Cyclohexane

Cyclohexanol

D

Detergents

Dextrose

Digitonin

Dimethyl formamide

Dimethyl acetic acid

Dioxan

Dulcitol

E

Ester
Ethanol
Ether
Ethyl acetate
Ethylene dichloride

F

Fodder
Foodstuffs
Formaldehyde
Formic acid up to 10%
Fructose

G

Galactose
Gelatine
Glacial acetic acid
Glucose
Glycerine
Glycocol
Glycol
Graphite
Greases
Gypsum

H

Heparin
Heptanol
Hexane
Hexanol
Hydrogen peroxide 3%
Hypophysin

I

Imido „Roche“
Immersion oil
Ink
Inorganic salts and their mixtures
Inositol
Insecticides
Isoamyl acetate
Isopropanol

K

Ketone

L

Lactic acid
Lactose
Lead acetate
Lead nitrate
Laevoluse
Lipstick
Lithium carbonate

M

Magnesium carbonate
Magnesium chloride
Magnesium sulphate
Maltose
Manitol
Mannose
Mineral salts

N

Nail varnish
Nail varnish remover

α -Naphtol
 α -Naphtylamine
Nickel sulphate
Nicotine
p-Nitrophenol
Nonne-Appelt-reagent

O

Octanol
n-Octyl alcohol
Olive oil
Oleic acid
Organic solvents
Ointments

P

Pandy's reagent
Paraffin waxes
Paraffinic oil
Pentanol
Peptone
Petroleum benzin
Phenol and phenol derivatives
Phenolphthalein
Polishing agents (creams/waxes)
Potash lye up to approx. 10%.
Potassium bromate
Potassium bromide
Potassium carbonate
Potassium chloride
Potassium hexacyanoferrate
Potassium iodate
Potassium nitrate
Potassium sodium tartrate

Potassium sulphate

Potassium tartrate

Potato starch

Propanol

1,2-Propylene glycol

Pyridine

Q

Qinol

R

Raffinose

Rhamnose

Rochelle salt

S

Saccharose

Salicylaldehyde

Salicylic acid

Saponon

Seawater

Soap

Sodium acetate

Sodium carbonate

Sodium chloride

Sodium citrate

Sodium diethylene barbiturate

Sodium hydrogen sulphite

Sodium hydrogencarbonate (Sodium carbonate)

Sodium hydroxide solution (up to approx. 10%)

Sodium hyposulphite

Sodium nitrate

Sodium phosphate

Sodium silicate

Sodium sulphate

Sodium sulphide

Sodium tartrate

Soil

Soot

Sorbitol

Standard acetate solution

Standard I + II -Nutrient agar

Standard I + II -Nutrient broth

Starch

Starch -common salt solution

Stearic acid

Styrene

Sugar and sugar derivatives

Sulphur

T

Talcum powder

Tannic acid

Tartaric acid

Tea

Test serum for blood grouping

Tetrahydrofuran

Tetraline

Thiourea

Toepfer's reagent

Toulene

Trehalose

Trichloro ethylene

Trypsin

Trytophane

Turpentine

Tymol

Tymol buffer solution

U

Urea solution

Urease

Uric acid

Urine

V

Vanillin

Vaseline

W

Water

Water colours

X

Xylene

Y

Yeasts

Z

Zinc chloride

Zinc sulphate

No damage under short exposure

Surfaces from item Plastics remain unchanged when the following substances are spilt on them (particularly in liquid or dissolved form) or if they are in contact for a short amount of time. That means the panels are washed with a wet towel within 10-15 minutes and then rubbed dry. Please note that the time of exposure is an important factor in the extent of corrosion on the HPL surfaces, even with diluted agents. As a result of the evaporation of the diluted material, the concentration of the substance increases over a period of time and the surfaces of item Plastics will be corroded, even though the concentration used will mostly be below those named in the following list. Focused sample tests are recommended.

A

Amino-S acid up to 10%
Aniline dyes
Antiliming agents
Arsenic acid up to 10%

B

Boric acid

C

Crystal violet (Gentian violet)

E

Esbach's reagent

F

Formic acid over 10%
Fuchsine solution

H

Hair dyes and bleaches
Hydrochloric acid up to 10%
Hydrogen peroxide over 3-30% (Perhydrol)

I

Inorganic acids up to 10%
Iodine solution
Iron (II) chloride solution
Iron (III) chloride

M

Mercury (II) chromate
Methylene blue
Millon's reagent

N

Nitric acid up to 10%
Nylander´s reagent

O

Oxalic acid

P

Phosphoric acid up to 10%
Picric acid
Potash lye over 10%
Potassium hydrogensulphate
Potassium chromate
Potassium dichromate
Potassium iodide
Potassium permanganate

S

Silver nitrate
Sodium hydrogen-sulphate
Sodium hydroxide sol. over 10%
Sodium hypochloride
Sodium thiosulphate
Sublimate solution (= mercury (II) chloride)
Sulphuric acid up to 10%
Sulphurous acid up to 10%

V

Varnishes and adhesives, (chemically curing)

High damage risk

The following chemicals destroy item Plastics surfaces and must be removed immediately, as they could also leave behind dull spots and coarseness.

A	H	P
In concentrations greater than 10%: Amino Amino sulpho acid	Hydrochloric acid Hydrofluoric acid Hydrogen bromide	Phosphoric acid
Inorganic acids such as Arsenic acid Aqua regia	N	S
C	Nitric acid	Sulphuric acid
Chromosulphuric acid		

Aggressive Gases

Frequent exposure to the following aggressive gases and vapours can lead to changes in the FunderMax Compact Interior panel surfaces.

A
Acid vapours
B
Bromine
C
Chlorine
N
Nitrose fumes
S
Sulphur dioxide