Product Data Sheet - Plastic 4mm, 6mm, 10mm, 16mm

Article

Art.-No.	Article	Dimension	Colour
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	
0.0.727.41	Plastic 6mm	panel dimension approx. 2800x1850 mm	white similar RAL 9016
0.0.727.42		cut-off max. 2770x1820 mm	
0.0.727.49	Plastic 6mm	panel dimension approx. 2800x1850 mm	black similar RAL 9017
0.0.727.50		cut-off max. 2770x1820 mm	
0.0.727.29	Plastic 6mm	panel dimension approx. 2800x1850 mm	grey similar RAL 7035
0.0.727.30		cut-off max. 2770x1820 mm	
0.0.727.33	Plastic 6mm ESD	panel dimension approx. 2440x1220 mm	grey similar RAL 7035
0.0.727.34		cut-off max. 2410x1190 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	

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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

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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	$10^{-6} \times K^{-1}$	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..

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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.

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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

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Dimethyl formamide
Dimetyhl 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
Glycocoll
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
Phenolphtalein
Polishing agents (creams/waxes)
Potash lye up to approx. 10%.
Potassium bromate
Potassium bromide
Potassium carbonate

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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

Saccarose
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 derivates
Sulphur

T

Talcum powder
Tannic acid
Tartaric acid
Tea
Test serum for blood grouping
Tetrahydrofuran
Tetraline
Thiourea
Toepfer‘s reagent
Toulene
Trehalose
Tricholoro 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

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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)

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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

In concentrations greater than 10%: Amino Amino sulpho acid

Inorganic acids such as Arsenic acid

Aqua regia

C

Chromosulphuric acid

H

Hydrochloric acid

Hydrofluoric acid

Hydrogen bromide

N

Nitric acid

P

Phosphoric acid

S

Sulphuric 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

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