TECHNICAL DATA SHEET

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Lasertec

	DIN	ISO	ASTM	UM	VALUE
General characteristics					
Specific gravity	53479	1183	D792	g/cm³	1.15
Water absorption	53492	62	D570	%	0.36
Mechanical properties					
Tensile strength	53455	527	D638	MPa	38
Ultimate elongation	53455	527	D638	%	35
Rockwell hardness	/	2039	D785	/	M 42
Impact strength (CHARPY unnotched)	53453	179	/	KJ/m	50
Impact strength (IZOD notched)	53453	180	D256	J/m	58.5
Optic properties					
Refractive index B	53491	489	/	/	1.49
Transmittance	5036	/	/	%	90
Thermic properties					
Vicat softening point B/50	53460	306	D1525	°C	88.5
HDT under load -1,82 MPa	53461	75	D648	°C	84,5
Coefficient of thermic expansion	53752	/	/	-6 10 K	100

Technical characteristics

Material:	Impact Modified Acrylic
Temperature range:	From - 40°C to + 80°C
Scratch resistance:	Internal Test with Sclerometer (value=300gr)

Outdoor Use:	Yes
Indoor Use:	Yes
Fire resistance:	UL94 method - HB class
Odour:	Odourless
Engraving method:	Pantograph, Laser
Engraving depth:	0,3 mm (0,5 mm for metal tops)

Aesthetic characteristics

Top finish:	Matt, Glossy, Textured
Surface finish:	Without any hole, inclusion, scratch, according to the approved sample
Contaminations:	N° 01 ≤ 1 mm N° 01 ≤ 0,5 mm N° 03 ≤ 0,2 mm

Geometrical characteristics

Sheet dimensions:	1220 x 610 mm (tolerance +/- 0,2%) edges at right angles
Total thickness:	0.7, 1.5 mm (tolerance +/- 0.1 mm) 3.1 mm (tolerance +/- 0.2 mm)
Thickness of the top:	0,1 e 0,2 mm (tolerance +/- 0,03 mm)

UV Colour resistance

The lowest value measured according to the “blue colour scale” is:
4/5 for the coloured sheets
4 for the metals sheets
The tests have been made in QUV.

Resistance to varnish and similars

+ Non aromatic petrol
o Pure oil paints
o Inks and varnish for acrylic glass
- Nitro varnish
- Diluent, in general

Resistance to chemical agents, solvents

+ Acid for accumulators	+ Sodium bisulphite	- Amylacetate
+ Alum	+ Sodium carbonate	- Aniline
+ Aluminium chloride	+ Sodium chlorate	- Acetic acid, concentrated
+ Aluminium oxalate	+ Sodium chloride	- Acetone
+ Aluminium sulphate	+ Sodium hypochlorite	- Benzaldehyde
+ Ammonia Alaune	+ Sodium sulphate	- Benzol
+ Ammonium sulphate	+ Sodium sulphide	- Bromine
+ Aqueous zinc sulphate	+ Solid zinc sulphate	- Butanol
+ Arsenic	+ Stannous chloride	- Carbon sulphide
+ Arsenic acid	+ Stearic acid	- Carbon tetrachloride
+ Calcium chloride	+ Sulphur	- Chlorinated hydrocarbon
+ Calcium hypochlorite	+ Sulphuric acid, up to 30%	- Chloroethylether
+ Calcium milk	+ Sulphurous acid up to 5%	- Chlorophenol
+ Caustic potash	+ Sulphuryl chloride	- Concentrated ethanol
+ Caustic soda	+ Sulphur sodium	- Concentrated methanol
+ Citric acid, up to 20%	+ Tartaric acid up to 50%	- Diacetonic alcohol
+ Diethylenglicol	+ Triethanolamine	- Dibutilfphalate
+ Ferric chloride	+ Trycresil phosphate	- Dioctilfphalate
+ Ferrous chloride	+ Turpentine oil	- Dioxane
+ Formic acid, up to 20%	+ Oxygenized water up to 40%	- Ether
+ Glycerine	+ Uric acid up to 20% or chlorwater	- Ethyl acetate
+ Glycol	o Acetic acid up to 25%	- Ethyl bromide
+ Heptane	o Ammonia	- Ethyl butyrate
+ Hexane	o Butyric acid up to 5%	- Ethylene bromide
+ Hydrogen peroxide up to 40%	o Chromic acid	- Hydrocarbon chlorate
+ Iron vitriol	o Ciclohexanole	- Lactic acid butylester
+ Lactic acid, up to 20%	o Concentrated sulphurous acid	- Liquid chlor
+ Magnesium chloride	o Cyclohexane	- Liquid chlor
+ Magnesium sulphate	o Diamylphtalate	- Liquid sulphurous anhydride
+ Manganese sulphate	o Ethanol, up to 30%	- Liquid Sulphurous dioxide
+ Mercury	o Formic acid, up to 40%	- Methylethylketone
+ Metal iodine	o Hydrochloric acid	- Nitric acid, over 70%
+ Metallic iodine		- Perchloroetyhylene
+ Monobromic naphthalene	o Hydrogen peroxide over 40%	- Phenol
+ Nichel sulphate	o Isopropylic alcohol	- Phosphorous trichloride
+ Nitric acid, up to 20%	o Methanol, up to 30%	- Pyridine
+ Octane	o Nitric acid, from 20 to 70%	- Silicon tetrachloride
+ Oil turpentine	o Oil	- Spirit
+ Oxalic acid	o Oxygenized water over 40%	- Thionyl chloride
+ Petroleum ether	o Petroleum	- Toluol
+ Phosphate	o Substitute turpentine	- Trichloroacetic acid

+ Potassium bicarbonate
+ Potassium carbonate
+ Potassium chloride
+ Potassium dichromate
+ Potassium hydrate
+ Potassium nitrate
+ Potassium permanganate
+ Potassium cyanide
+ Propyl
+ Pure petrol
+ Silver nitrate
+ Soapy water
+ Soda
+ Sodium acetate 32%

- White Phosphor
- Xylol

+ = resists o = it resists relatively - = it doesn´t resist

LASERTEC is free from halogen and silicon. LASERTEC is UV-resistant and tested in extreme circumstances with regard to durability against weathering. LASERTEC keeps a brilliant surface during a long term period, as well as it keeps it physical characteristics.

The above state information refers to tests carried out at given parameters and on items in standard conditions. The product is suitable only for the above mentioned standard usage parameters. The manufacturer declines any responsibility in case of improper use of the product when the product is exposed to stresses exceeding the values stated herein.