→ TroPly Ultra, TroPly Ultra Reverse, TroPly HiGloss, TroPly HiGloss Reverse – Technical Data Sheet



	DIN	ISO	ASTM	UNIT	VALUE
General characteristics					
Specific density	53479	1183	D792	g/cm³	1.15
Water absorption	53492	62	D570	%	0.36
Mechanical properties					
Tensile strength	53455	527	D638	MPa	38
Elongation at break	53455	527	D638	%	35
Rockwell hardness	/	2039	D785	/	M 42
Impact strength (CHARPY un-notched)	53453	179	/	KJ/m²	50
Impact strength (IZOD notched)	53453	180	D256	J/m	58.5
Optical properties					
Refractive index B	53491	489	/	/	1,49
Transparency	5036	/	/	%	90
Thermal properties					
Vicat softening temperature B/50	53460	306	D1525	℃	88,5
HDT under load – 1.82 MPa	53461	75	D648	℃	84,5
Coefficient of thermal expansion	53752	/	/	10-6 K	100
UV colour stability					
The lowest measured value according to the "blue colour scale" is:		4/5 for coloured boards 4 for metal sheets			
The tests were carried out using the QUV method.					

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Resistance to lacquer and suchlike

- + Non-aromatic petrol
- o Pure oil paints
- o Inks and lacquer for acrylic glass
- Nitrocellulose lacquer
- Thinner, general

Resistance to chemicals, solvents

- + Non-aromatic petrol
- o Pure oil paints
- Thinner, general
- o Inks and lacquer for acrylic glass
- Nitrocellulose lacquer
- Ethyl acetate
- + Sodium acetate, 32%
- Acetone
- + Battery acid
- o Acetic acid, up to 25%
- Acetic acid, concentrated
- + Arsenic acid
- o Butyric acid, up to 5%
- + Citric acid, up to 20%
- o Hydrochloric acid
- o Chromic acid
- o Fluoric acid, up to 20%
- + Formic acid, up to 20%
- o Formic acid, up to 40%
- + Phosphoric acid, up to 10%
- + Lactic acid, up to 20%
- + Nitric acid, up to 20%
- o Nitric acid, from 20 to 70%
- Nitric acid, over 70%
- + Oxalic acid
- + Sulfuric acid, up to 30%
- + Sulfurous acid, up to 5%
- o Concentrated sulfurous acid
- + Stearic acid
- + Tartaric acid, up to 50%
- Trichloroacetic acid
- o Cyclohexane
- o Cyclohexanol
- + Sodium chlorate
- Liquid chlorine
- Chloroethyl ether
- Chlorophenol
- + Aluminium chloride
- + Calcium chloride
- + Iron(II) chloride
- + Iron(III) chloride
- + Magnesium chloride
- + Potassium chloride
- + Sodium chloride
- + Sulfuryl chloride
- + Tin(II) chloride
- Thionyl chloride

- + Uric acid, up to 20%, or chlorine water
- + Oxygen-enriched water, up to 40%
- Oxygen-enriched water, over 40%
- + Soapy water
- Diacetone alcohol
- o Isopropyl alcohol
- + Alum
- Amyl acetate
- o Ammonia
- Liquid sulfur dioxide
- Aniline
- + Arsenic
- Benzaldehyde
- + Pure petrol
- Benzene
- + Potassium dichromate
- + Sodium bisulfite
- Bromine
- Ethyl bromide
- Ethylene bromide
- Butanol
- Butyl lactate
- Ethyl butyrate
- + Potassium carbonate
- + Sodium carbonate
- + Potassium cyanide
- + Sodium hypochlorite
- + Lime water
- + Mercury
- o Methanol, up to 30%
- Concentrated methanol
- Butanone
- + Monobromo naphthalene
- + Silver nitrate
- + Potassium nitrate
- + Aluminium oxalate
- + Octane
- Perchloroethylene
- + Potassium permanganate
- + Hydrogen peroxide, up to 40%
- Hydrogen peroxide, over 40%
- െ വി
- + Potassium hydroxide solution
- + Propyl
- Pyridine
- + Sodium bicarbonate
- + Sodium hydroxide solution

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- Liquid chlorine o Diamyl phthalate - Dibutyl phthalate + Diethylene glycol - Dioctyl phthalate - Dioxane + Heptane + Hexane o Ethanol, up to 30% - Concentrated ethanol - Ether + Petroleum ether - Phenol + Phosphate + Tricresyl phosphate - White phosphorus + Glycerin + Glycol - Chlorinated hydrocarbon - Metallic iodine + Calcium hypochlorite - Phosphorus trichloride + Triethanolamine + Iron vitriol	+ Aluminium sulfate + Ammonium sulfate + Magnesium sulfate + Manganese sulfate + Nickel sulfate + Sodium sulfate + Solid zinc sulfate + Aqueous zinc sulfate - Carbon disulfide + Sodium sulfide - Methylated spirit - Carbon tetrachloride - Silicon tetrachloride - Toluene + Turpentine o White spirit + Sulfur - Xylene	
THE SYMBOLS STAND FOR:	- = not resistant o = relatively resistant + = resistant	
Technical characteristics		
Material:	impact modified acrylic	
Temperature resistance:	from -40 °C to +80 °C	
Scratch resistance:	internal test with sclerograph (value = 300 g)	
Outdoor use:	yes	
Indoor use:	yes	
Fire resistance:	UL94 method – class HB	
Odour:	odourless	
Engraving method:	pantograph, laser	
Lingiaving method:	pantograph, laser	

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