

Product range

NUDEC°PET

NUDEC[°]PETg

NUDEC°PC

NUDEC°PMMA

NUDEC°SANuv

NUDEC°PS

NUDEC PET 00

Polyethylente	erephthalate sheets			Thickness and number of sheets per pallet								
Pattern	Colour	Specifications	L. T.	Dimensions	0,5 0,7	0,75 1	1,1 1,5	2 3				
Plain	Clear			3.050 x 2.050	-		100 70	50 35				
				2.050 x 1.250	350 250	250	150	100 80				
Arraglass	Clear			2.050 x 1.250	250	200	150					
					Thickr	ness (mm - <i>in</i>) and	d number of sheets	per pallet				
Pattern	Colour	Specifications	Dimensions	0,5020	0,75 - <i>.030</i>	1040	1,5060	2080				
Plain	Clear		2.440 x 1.220	400	260	200	130	100				

NUDEC PET 01

Polyethylent	erephthalate sheets				Thickness	and number of sheets	per pallet
Pattern	Colour	Specifications	L. T.	Dimensions	4	5	6
Plain	Clear			3.050 x 2.050	25	20	15

NUDEC PETg

Polyethylent	erephthalate copoly	mer sheets, modifie	d with CHDM			Thickn	less and nu	imber of sh	eets per p	allet		
Pattern	Colour	Specifications	L. T.	Dimensions	0,5 0,7	1 1,1	1,5 2	3 4	56	8 10) 12	15
Plain	Clear			3.050 x 2.050	-	100	80 60	40 30	25 20	15 12	10	8
				2.050 x 1.250	300 250	200	150 120	80				
	Opal 529	UV 2 faces	38%	3.050 x 2.050			60	40 30				
						Thickness (mm - <i>in</i>) ar	nd number (of sheets _l	per pall	et	
Pattern	Colour	Specifications	Dimensions	0,5020 0,75030	1040	1,5060	2080	2,5100	3120	4,5	5,6	6
Plain	Clear		2.440 x 1.220	400 260	200	130	105	85	72	48	38	36

NUDEC PC

Polycarbonat	e sheets						Thic	kness	and n	umbei	r of sh	eets p	er pal	let		
Pattern	Colour	Specifications	L. T.	Dimensions	0,75	1	1,5	2	3	4	5	6	8	10	12	15
Plain	Clear	•		3.050 x 2.050	•		80	60	40	30	25	20	15	12	10	8
				2.050 x 1.250	250	200	150	120	75	60	50	40				
	Clear 211	UV 2 faces		3.050 x 2.050				60	40	30	25	20	15	12	10	8
	Opal 493	UV 2 faces	38%	3.050 x 2.050				60	40	30	25					
	Opal 645		35%	2.050 x 1.250		200										
	Bronze 625	UV 2 faces	40%	3.050 x 2.050					40	30	25	20	15			
Ref. 141	iFrost 642		75%	2.500 x 1.250				100	70							
						-	Thic	kness	and n	umbei	r of sh	eets p	er pal	let	-	
Pattern	Colour	Specifications	Dimensions	0,75030 104) 1,50	060	208	0	3120		4	5	e	5	8	10
Plain	Clear	-	2.440 x 1.220	260 200	140											

120

80

60

48

40

30

24

NUDEC PMMA

Clear 211

UV 2 faces

2.440 x 1.220

Polymethylm	ethacrylate sheets						Th	icknes	s and	numb	er of s	sheet	s per p	allet		
Pattern	Colour	Specifications	L. T.	Dimensions	1,5	2	2,5	3	4	5	6	8	10	12	15	20
Plain	Clear			3.050 x 2.050	80	60	50	40	30	25	20	15	12	10	8	6
	Opal 385		34%	3.050 x 2.050		60		40	30	25						
	lce 519		70%	3.050 x 2.050		60		40								
	Opaque white 084		≤6%	3.050 x 2.050		60		40	30	25						
	Opaque black 377			3.050 x 2.050		60		40	30	25						
Microprism	Clear			2.500 x 1.250		100		60								
Arraglass	iFrost 381		75%	2.500 x 1.250		100		70								

NUDEC PMMA HI

Polymethylm	ethacrylate high imp	act sheets				per of sheets per pa	llet	
Pattern	Colour	Specifications	L. T.	Dimensions	2	3	4	5
Plain	Clear	HI25		3.050 x 2.050	60	40	30	25
		HI50		3.050 x 2.050	60	40	30	25

NUDEC SANuv

Acrylonitrile	- styrene sheets					Thickne	ess and numb	er of sheets p	per pallet	
Pattern	Colour	Specifications	L. T.	Dimensions	2	2,5	3	4	5	6
Plain	Clear	UV		3.050 x 2.050	60	50	40	30	25	20



Polystyrene sh	eets					Т	hickness a	ind numb	er of shee	ets per pal	let	
Pattern	Colour	Specifications	L. T.	Dimensions	1,5	2	2,5	2,8	3	3,1	4	5
Plain	Clear			3.050 x 2.050	80	60			40		30	25
				2.000 x 1.340	200	125						
Arraglass	Clear	Anti-reflex		2.150 x 1.250	150							
				1.500 x 1.000	250							
44 Aqua Viva	Clear			2.000 x 1.340				100				
40 Gotas	Clear			2.000 x 1.340				100				
105 Milgotas	Clear			2.000 x 1.340				100				
134 Quadrat	Clear			2.000 x 1.340			100					
03 Cuarzo	Clear	UV		2.000 x 1.340				100				
16 PL	Clear	UV		2.000 x 1.340						80		
20 Teide	Clear	UV		2.000 x 1.340				100				

The stated light transmission (L. T.) corresponds with 3 mm thick sheets (except where stated otherwise). For details on other thicknesses, please refer to our R&D Department. Light transmission tolerance is ± 5 .



Commitment to the environment We care about the environment through clean manufacturing process will not damage the environment

Full control of processes, by keeping waste properly separated and controlled by authorised waste disposers. Furthermore, no atmospheric gases are emitted and optimum consumption of natural resources is achieved. An enormous effort that has earned the company the ISO 14001 environmental certificated issued by TÜV Rheinland Group. We also work towards arousing awareness among our employees about respecting the natural environment.



Manufacture program of non standard products

The products registered in the manufacture program enable to choose the thickness and colour of the sheets. It must be taken into account that the tonality and light transmission can be different from trials carried out with standard products. For further information you can address to your Sales Area Manager or to NUDEC Commercial Department. It must be consulted the manufacture viability of special formats as well as production minimums. The quantity of the sheets for special sizes orders can range from 5% at the most.

Features									
Pattern	Colour	Specifications	PET00	PET01	PETg	PC	PMMA	SANuv	PS
Plain	Clear	RW ¹				•			
Plain	Clear	UV 2 faces	•	•	٠				
Plain	Black <i>piano</i>						٠		
Plain	Opaque black					•		•	•
Plain	Opaque withe								•
Ref. 141	Clear	2 faces			•				
Ref. 141	Opaque black	2 faces							
Ref. 810 ²	Opaque black					•			
Patterns ³			•		٠	•	•	•	•

¹Polycarbonate sheet with the possibility of a high percentage of the raw material used in the production of a certified renewable origin.

²This relates to patterned sheets measuring 2.050 mm wide.

³Our range of patterns can be viewed on our website (www.nudec-plastic.com) and by going to *Products/ Patterns Viewer*.

Manufacturing features

Tolerances		
	PS / SANuv	PMMA / PET / PETg / PC
Long	±2 mm	±2 mm
Width	±1 mm	±1 mm
Squaring	3 mm	3 mm
Thicknesses	±0,1 mm	≤2,5 mm ±10%
		>2,5 mm ±5%

Technical features

Specifications										
	Code	Unit	PET	PETg	PC	PMMA	HI25	HI50	SANuv	PS
Physical										
Density	ISO 1183	g.cm ³	1,34	1,27	1,20	1,19	1,18	1,17	1,08	1,05
Mechanical										
Tensile strength to deformation	ISO 527	MPa	59	53	60	-	-	-	-	-
Tensile strength to breaking	ISO 527	MPa	Does not break	26	72	83	70	65	67	59
Elongation to breaking	ISO 527	%	Does not break	>200	150	5	10	15	2,5	3
Elasticity modulus in traction	ISO 527	MPa	2.420	2.200	2.300	3.200	2.750	2.600	3.700	3.250
Stiffness	ISO 178	MPa	86	79	97	120	-	-	97	106
Charpy impact test with notched specimen	ISO 179	Kj.m ⁻²	-	10	55	-	-	-	1,28	1,47
Charpy impact test	ISO 179	Kj.m ⁻²	Does not break D	oes not break	-	20	35	50	17	16
Rockwell hardness, M/R scale			-/111	-/115	72/118	92/-	-	-	83/-	-
Ball pressure hardness	ISO 2039	MPa	117	-	-	185	-	-	165	150
Optical										
Light transmission	ASTM D-1003	%	89	88	87-91	92	92	92	86	89
Refractive index	ASTM D-542	%	1,58	1,57	1,59	1,49	1,49	1,49	1,56	1,59
Thermal										
Maximum continuous usage temperature		°C	60	60	120	80	-	-	85	80
Softening temperature, VICAT (10 N)	ISO 306	°C	79	83	-	116	-	-	108	106
Softening temperature, VICAT (50 N)	ISO 306	°C	75	78	151	107	102	100	105	101
Heat deflection temperature, HDT A (1.8 MPa)	ISO 75-2	°C	69	68	143	97	93	92	98	86
Heat deflection temperature, HDT B (0.45 MPa)	ISO 75-2	°C	73	72	146	101	-	-	101	98
Coefficient of linear termal expansion	ISO 75-2	x10 ⁻⁵ . °C	<6	6,8	6,8	7	-	-	7	8

Standard characteristics of resin. This data comes from raw material values.

Chemical resistance

chennearresistance						
Chemical product	PET	PETg	PC	PMMA	SANuv	PS
Mineral oil						
Vegetable oil	S	S	S	S	S	S
Acetone	U	U	U	U	U	U
Acetic acid	S	R	S	U	R	S
Water	S	S	S	S	S	S
Turpentine	S	S	U	R	U	U
Ammonia	U	U	U	R	S	S
Detergents	S	S	S	R	S	S
Ethanol	S	S	S	U	R	S
Petrol	S	S	I	S	S	U
Glycerine	S	S	R	S	S	S
Methanol	R	R	U	U	R	S
Toluene	S	U	U	U	U	U

Behaviour: S (satisfactory), R (regular), U (unsatisfactory).

NUTEC PET Polyethylenterephthalate sheets

NUDEC'PET sheets have a good fire resistance classification because they are selfextinguishing. They can be used with food products and their high resistance to chemical agents and environmental impacts. They also save time and energy because they do not require prior drying and are quickly thermoformed. There are many uses for this type of sheet, which range from domes, building roofs, greenhouses to shields and anti-vandal protection, glazing applications, signs, displays, trays and dispensing machines etc. Some of these applications require UV treatment.

NUJEC PETg

Polyethylenterephthalate copolymer sheets modified with CHDM

Displays, moulds, signs, orthopaedics, toys, dispensing machines, cycling helmets, protective masks and containers, among many other products, can be produced using these sheets. Its hardness, impact strength and chemical agent resistance, together with its transparency and ductility are among its main characteristics. Similarly, these qualities make NUDEC^{*}PETg easy to handle, stressing that it can be cold-bent (up to 2-mm thick) and cut, even by laser.

NUDEC PC

Polycarbonate sheets

Polycarbonate sheets are noteworthy for their high performance, as well as high impact strength and heat resistance (maximum continuous environmental temperature is 120 °C, which makes it an ideal product for the manufacture of protective elements both for persons and machines. It finds extensive use in construction applications (walls, roofs and glazing etc). It is available with UV protection. It is the optimum material for signs, machinery, dispensing, display and PLV, etc.

NUDEC PMMA

Polymethylmethacrylate sheets

In view of its excellent stability to outside weather, its ease of moulding and high degree of transparency and light transmission (92%), these sheets are ideal for signalling, sign and lighting products. Their high optical quality also makes them suitable for certain magnifying glasses, lenses and for manufacturing mirrors. Other products for publicity, points of sale, canopies, separating screens or domes can also be produced with these sheets.

NUDEC SANuv

Acrylonitrile - styrene sheets

Among the many properties that define these sheets are their mechanical and chemical resistance, hardness and ease of handling and moulding. All these make them especially recommended for industrial parts, such as cold chambers and freezers, audio and video components, glazing to garage and facevan doors, containers and packaging, displays and showcases etc.



Polystyrene sheets

The high light transmission (89%) provides the sheets with excellent transparency for interior glazing usage, frames, lamps and ceiling light fittings. For this latter type of applications, the smooth white, porcelain, ice or technical prints are very suitable, thanks to their special design and factory incorporated UV treatment. Similarly, NUDEC'PS sheets comply with the European EN 71 on toy safety, which means that they are also suitable for this product type. Their low tendency to absorb water facilitates their use in humid environments and applications, such as bath or shower cabin doors and consumer electronics. Other possibilities for these sheets include household items, DIY, displays, showcases, stairway sides, ambience dividers, interior glazing for doors or windows.

NUDEC°PET

NUDEC°PETg

NUDEC°PC

NUDEC°PMMA

NUDEC°SANuv

NUDEC°PS

RESPONSIBILITY CLAUSE

- NUDEC, S. A. supplies its products according to the indications carried out by the purchaser regarding to the material and quality requested, always above NUDEC, S. A. manufacturing standards. In this sense, NUDEC, S. A. provides to his customers all the professional and technical information which comes from the analysis of its products. However, no warranty is neither foreseen nor understood, whatever it is explicit or implicit, about the properties of the product in the legal sense.

- Once carried out the delivery of the material on behalf of NUDEC, S. A., the purchaser is fully responsible of the subsequent application, treatment, use and/or purpose of the material, whatever if the material is used by the purchaser in question or other third parts, with entire indemnity for NUDEC, S. A. Moreover, according to containers and residues regulations (Act 11/1997 and Europe Directive 94/62/CE) the final holder is responsible of the correct management of the container's residues.

- The purchaser will be the only responsible for carry out the trials, tests or analysis of any nature which are necessary to verify that the product can be exactly applied to the aim wished by the purchaser or by third parties to whom the purchaser supply or install the product.

- NUDEC, S. A. will remain exempt from an inadequate or defective application of its products on the part of the purchaser or third parties, assuming only the damages derived directly from possible faults of its origin products. The possible lawsuit and controversy between NUDEC, S. A. and its customers will be submitted to the courts of Sabadell (Barcelona, Spain).



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