



Kömmerling[®]
TODAY FOR TOMORROW



INTEGRAL SKIN-FOAM SHEET FOR
ADVERTISING, BUILDING AND INDUSTRY

KömaCel[®]

EVEN GOOD THINGS CAN STILL BE IMPROVED ON

You have the choice. We the range.



A traditional brand in the profine Group, Kömmerling is a familiar name all over the world. Founded in 1897, the company started extruding window profiles and PVC sheets as early as 1967. Today, Kömmerling exports its products to about fifty countries worldwide. And this number is constantly growing.

Kömmerling enjoys a high reputation among its customers, not only because of product quality or its extensive range. What drives us is our pursuit of “the better”. This spirit can be felt at all of the company’s divisions. It is our daily motivation to go new ways with our customers and to conquer the market with new products, systems, services, and sales channels.

This drive is also based on the reliability of a large company that can respond unerringly to individual market requirements and the needs of its customers. A reliability that engenders trust and, combined with new ideas and pioneering technology, offers new possibilities. It is not without reason that the SPS product area with it is the global leader in the field of PVC sheets. Always endeavouring to keep on the move, to make the good even better, and by doing so to safeguard its customers’ lasting success. We call this quite simply the “Ever better principle”.

KömaCel
Integral skin-foam sheet for advertising, building and industry

KömaTex
Free skin-foam sheet for advertising

KömaPrint
Free skin-foam sheet for best printing results

KömaDur
PVC-U sheet system for virtually all areas

KömaStyle
Wall cladding system for modern interior design

KömaAlu
Aluminium composite sheet for indoor and outdoor applications

KömaPan
Tongue and groove profile for indoor and outdoor use

KömaSteel
KömaSteel WHITEBOARD
Steel composite sheet for a wide range of applications

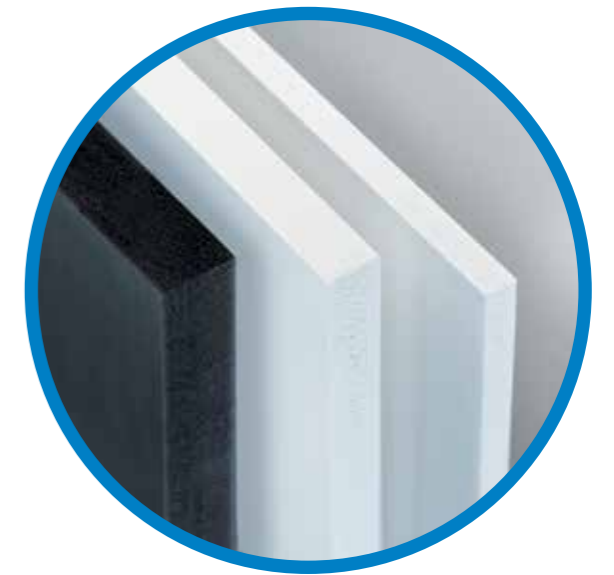
KömaCel®

THE ALLROUNDER WITH CONVINCING PROPERTIES

All positive properties combined in one material.

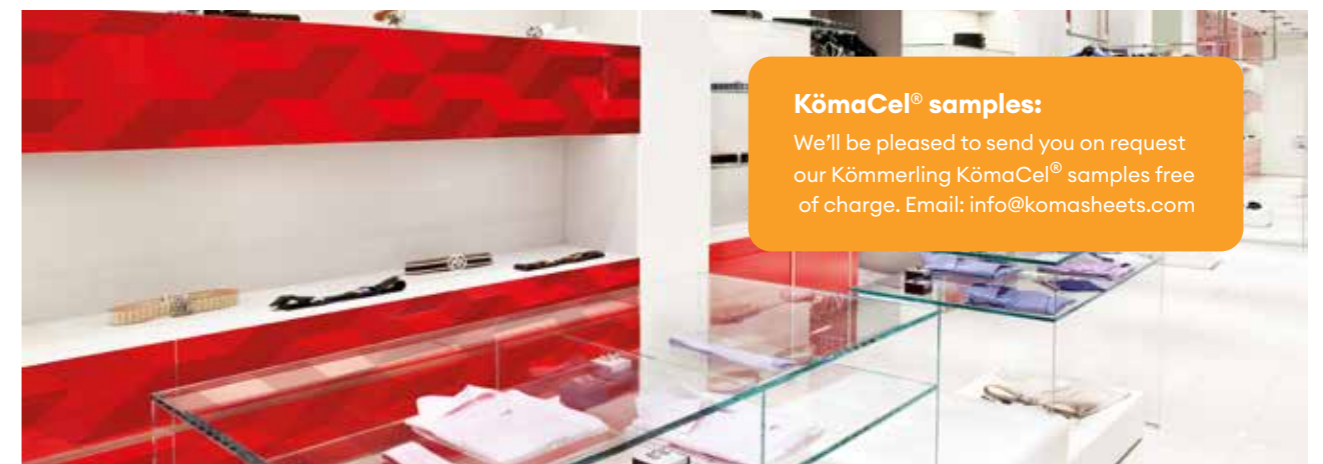
KömaCel® integral skinfoam sheets combine a strong, solid cover sheet and a celled core of the same material. They are manufactured in a single process. Backed by almost fifty years of experience with the material PVC, we have optimised the balance of cover sheet and core for our KömaCel, resulting in constant improvements to the acknowledged positive product properties. Optimally matched to the requirements on the market. KömaCel has simply deserved to be the world’s Number One Celuka extruder.

This perfect balance makes KömaCel® a material suitable for a great many applications, and hence a true allrounder with convincing properties. The surface of the strong, smooth outer cover lends the KömaCel® sheet its silky gloss effect. It is therefore ideal for screen printing and lamination. Yet the benefits of KömaCel® are highly regarded in all areas in the industrial and building sector as well. Compared with other products, these integral skinfoam sheets exhibit an extremely low thermal conductivity and good insulation and sound insulation values. Besides its weather and flame resistance,



KömaCel® can also be processed with the greatest of ease thanks to its unique structure.

KömaCel® is also available as an antibacterial variant KömaCel® AB. The antibacterial properties offer protection against mould, bacteria, and pathogens. The sheets satisfy the standards demanded by the health authorities (DIN 22196:2011).



KömaCel® samples:

We'll be pleased to send you on request our Kömmerling KömaCel® samples free of charge. Email: info@komasheets.com

Areas of application

ADVERTISING SECTOR

- > Signs
- > Banners
- > Inscription panels
- > Displays
- > Shop window decorations
- > Large lettering
- > Exhibition and showroom stands

BUILDING SECTOR

- > Shop design
- > Interior finishing
- > Wet rooms
- > Cladding
- > Roller shutter boxes
- > Opaque panel infills
- > Door and window elements

OTHER

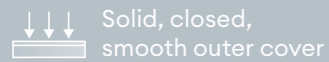
- > Model building
- > Furniture industry
- > Structured parts
- > Photo lamination
- > Traffic signs for construction sites
- > Chemical and laboratory areas
- > Ship, container, and vehicle interior fittings

ANTIBAKTERIELL

- > Professional kitchens and canteens
- > Laundries
- > Healthcare pools and sports school pools
- > Hospitals and retirement and nursing homes
- > Operating rooms
- > Cold stores
- > Clean rooms



Features



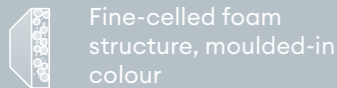
Solid, closed, smooth outer cover



Good for painting



Low water absorption



Fine-celled foam structure, moulded-in colour



Good acoustic insulation



Weatherproof and weather resistant



With glossy or matt surface



Good sound insulation



No swelling



Simple processing



Low thermal conductivity



100% recyclable



Very good bonding



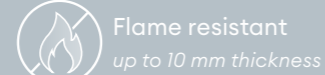
Very good flexural strength



Active and long antibacterial protection



Good printing qualities



Flame resistant up to 10 mm thickness



Elimination of microbes



Good for laminating



Chemical and corrosion resistant

Delivery programme

Dimensions (mm)	White 652 similar to RAL 9010 in thicknesses (mm)	White 654 similar to RAL 9016 in thicknesses (mm)	White AB 654 antibacterial in thicknesses (mm)	Black 992 similar to RAL 9011 in thicknesses (mm)	Piece / pallet
3050 x 1220		4	4		125
3050 X 1220		5	5		100
3050 X 1220		6	6		75
3000 X 1250	8		8	8	60/50
2000 X 1000	10	10			60
2500 X 1000	10	10			60
3000 X 1000	10	10			60
3000 X 1250	10	10	10	10	50 / 40
4000 X 1250				10	50
3000 X 1560	10				40
4000 X 1560	10				30
3000 X 1250	13	13	13		40
3000 X 1250		15	15		34
3000 X 1250		17	17		30
3000 X 1250		19	19	19	30
4000 X 1250		19			20
3000 X 1560		19			20
4000 X 1560		19			15
3000 X 1250		24			20
3000 X 1250		28			20
3000 X 1250		30			15

Sheets are available in a protective foil version (one or both sides).

TECHNICAL DATA

		Test method	Unit	Value		
				Thickness (mm) 4, 5, 6	Thickness (mm) 8, 10, 13	Thickness (mm) 15, 17, 19, 24, 28, 30
Mechanical properties						
Apparent density*		DIN EN ISO 1183	g/cm ³	0,55 – 0,70	0,50 – 0,55	0,50 – 0,55
Yield stress (tensile strength)		DIN EN ISO 527	MPa	≥ 20	≥ 13	≥ 6
Elongation at tear		DIN EN ISO 527	%	≥ 30	≥ 15	≥ 13
Compressive strength (Hooke's range)		DIN EN ISO 844	MPa	> 8	> 3	> 3
Compressive stress (30% compression)		DIN EN ISO 844	MPa	> 14	> 7	> 7
Modulus of elasticity		DIN EN ISO 527-2/1A/50	MPa	- 1100	- 800	- 800
Flexural strength		DIN EN ISO 178	MPa	≥ 30	≥ 20	≥ 20
Impact strength	+20 °C	DIN EN ISO 179 (Based on)	kJ/m ²	AV 15**	AV 20**	AV 25**
	0 °C			AV 13**	AV 15**	AV 20**
	-20 °C			AV 10**	AV 10**	AV 15**
Ball indentation hardness (132 N / 30 s)		DIN EN ISO 2039-1	MPa	> 10	> 10	> 15 – 20
Shore hardness D		DIN EN ISO 844		- 55	- 75	- 77
Thermal properties						
Deflection temperature		DIN EN ISO 75 (Process Ae)	°C	- 56	- 63	-
Vicat softening temperature		DIN EN ISO 306 (Process A50)	°C	≥ 75	≥ 75	77
Coefficient of linear thermal expansion (from -30 °C to +50 °C)		DIN EN ISO 11359-2	mm/mK	≤ 0,08	≤ 0,08	≤ 0,08
Thermal conductivity (from 0 °C to +60 °C)		DIN EN ISO 22007	W/(mK)	0,10	0,05 – 0,07	0,05 – 0,07
U-Value* (heat transfer coefficient)		DIN EN 674 (Based on)	W/(m ² K)	8 mm: 3,1 19 mm: 2,0	10 mm: 2,6 24 mm: 1,7	13 mm: 2,4 30 mm: 1,4
Electrical properties						
Surface resistance		DIN VDE 0303 T3 DIN IEC 93	Ω	10 ¹⁴	10 ¹⁴	10 ¹⁴
Volume resistivity		DIN VDE 0303 T3 DIN IEC 93	Ω · m	10 ¹⁵	10 ¹⁵	10 ¹⁵
Dielectric strength (sample thickness 4 mm)		DIN VDE 0303 T21	KV/mm	≥ 12	-	-
Comparative figure for tracking		DIN IEC 112		CTI 600	CTI 600	CTI 600
Other properties						
Water absorption after 7 days		DIN EN ISO 62	%	< 0,2	ca. 0,2	ca. 0,2
Weighted sound reduction index R _{wIP}		DIN EN ISO 10848	dB	10 mm: 27 19 mm: 29	13 mm: 28 24 mm: 30	15 mm: 28 30 mm: 32
Components used to prevent falls		TRAV		-	-	Category C requirements fulfilled
Permitted colour difference		DIN 6174		Colour white: ΔE ≤ 1,1 CIELAB units		
Physiological assessment				- generally recognised as safe -		
Fire behaviour	DIN EN 13501-1 (EU)	B-s3d0	654: 4 - 6	654: 8 + 10	-	-
		D-s3d2	-	652: 8 - 13	-	-
		D-s3d0	-	-	654: 30	-
		C-s3d2	AB: 6	AB: 8 + 10	-	-
	NF P 92-501 (FR)	M1	654: 4 - 6	654: 8 + 10	-	-
		M2	-	652: 8, 10, 13 654: 13	654: 15, 17, 19, 24, 28, 30	-
	UL 94 (USA)	V0	4 - 6	652: 10	-	-
	V0/5VB	-	654: 10	-	-	

Missing values cannot be measured with standardised instrumentation. There may be slight differences depending on the colour or on the sheet thickness. *These values are recommended for the average apparent density. **AV = average value

Virtually no limits to creativity

Machining

Cutting, sawing, turning, filing, drilling, planing, milling, grinding, and screwing

Forming

Bending, folding, and thermoforming

Printing, painting and laminating

All known methods of laminating and painting are possible.

Tolerances

Width	Width tolerance			
	-0/+2,5mm	-0/+5mm	-0/+7mm	-0/+8mm
800 mm		19		
1000 mm			10	
1220 mm	4, 5, 6			
1250 mm		15, 17, 19, 24, 30	8, 10, 13	
1560 mm			10	19

Length tolerance: -0/+10 mm | Straightness: max. 1,5 mm/m | Angle at saw cut: 0,5°

Ecological manufacture

In line with our environmental guidelines, Kömmerling PVC-U sheets are safe for humans and the environment during their manufacture, use, and disposal. They are free of formaldehyde, asbestos, lindane, PCB, PCP, CFCs, cadmium, and lead and do not contain any monomers, biocides, or plasticisers. At the end of their service lives, the sheets or sheet residue can be recycled. They are processed in shredders or grinders and then introduced to the manufacturing process for new sheets.

Certified quality

True to our “Ever better principle”, the acclaimed high quality of our products bear the hallmarks of our research and development work as well as decades of experience with synthetic materials. Tests are conducted over all stages – from the incoming raw materials to the final inspection of the finished products. Regular examinations by independent testing institutes confirm this high level of care. Logically, our quality assurance system has been DIN ISO 9001 certified.

Storage instructions

Always store KömaCel® sheets on a level surface in a dry, air conditioned environment at about 15–20 °C. The packaged sheets may not be exposed to weathering effects and direct sunlight.

#KömmerlingForTomorrow

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