

A range of food-grade sealing materials

Material	Polymer grade	Colour	Main properties			F&B standards compliance				Resistance to cleaning processes				Resistance to food								
			Temperature, min °C (°F)	Temperature, max °C (°F)	Hardness ¹⁾ Shore A Shore D	FDA	3A	EU	ADI free	Nitric acid (acidic CIP) ²⁾ Tested at 80 °C (175 °F), 2%	Caustic soda (alkaline CIP) ²⁾ Tested at 80 °C (175 °F), 3%	Phosphoric acid (acidic CIP) ²⁾ Tested at 80 °C (175 °F), 1%	Sodium hypochlorite Tested at 70 °C (158 °F), 3%	Distilled water Tested at 100 °C (210 °F)	Steam SOP Tested at 121 °C (250 °F)	Steam, SIP Tested at 121 °C (250 °F)	Dairy Tested at 121 °C (250 °F)	Olive oil Tested at 121 °C (250 °F)	Cocoa butter Tested at 121 °C (250 °F)	Fruit and sugar mass Tested at 121 °C (250 °F)	Sausage, meat Tested at 121 °C (250 °F)	Alcoholic beverages <15% Tested at 121 °C (250 °F)
Thermoplastic elastomers																						
H-ECOPUR	TPU	red	-20 (-5)	+110 (+230)	95 ± 2 48 ± 3	YES ³⁾	YES	YES	YES	+	+	+	+	+	+/0	0/-5)	+	+	+	+	+	+
H-ECOPUR 95A-NC	TPU	opaque	-20 (-5)	+110 (+230)	95 ± 2 48 ± 3	YES	YES	YES	YES	+	+	+	+	+	+/0	0/-5)	+	+	+	+	+	+
H-ECOPUR 95A-blue	TPU	blue	-20 (-5)	+110 (+230)	95 ± 2 48 ± 3	YES	YES	YES	YES	+	+	+	+	+	+/0	0/-5)	+	+	+	+	+	+
ECOPUR 95A-bl-FG	TPU	blue	-50 (-60)	+100 (+210)	95 ± 2 47 ± 3	YES	YES	YES	YES	-	+	+	+	0	-	-	+	+	+	+	+	0
H-ECOPUR 85A	TPU	red	-20 (-5)	+100 (+210)	85 ± 2 35 ± 3	NO	n.d.a.	NO	YES	n.d.a.	n.d.a.	n.d.a.	n.d.a.	+	0	-	+	+	+	+	+	0
Elastomers																						
SKF Ecorubber-H 85A-b-FG	HNBR	black	-25 (-15)	+150 (+300)	85 ± 5	n.a.	YES	YES	YES	0	+	+	0	0	0	0	+	+	+	+	+	+
SKF Ecorubber-2 85A-w-FG	FKM	white	-20 (-5)	+200 (+390)	85 ± 5	n.a.	YES	YES	YES	+	0	+	+	0	-	-	+	+	+	+	+	+
SKF Ecorubber-3 85A-w-FG	EPDM	white	-50 (-60)	+150 (+300)	85 ± 5	n.a.	YES	YES	YES	+	+	+	+	+	+	0	-	+	+	+	+	+
SKF Ecorubber-3 85A-b-FG	EPDM	black	-50 (-60)	+150 (+300)	85 ± 5	n.a.	YES	YES	YES	+	+	+	+	+	+	+	-	+	+	+	+	+
SKF Ecosil	MVQ / VMQ	reddish brown	-60 (-75)	+200 (+390)	85 ± 5	n.a.	YES	YES	YES	+	+	+	+	+	-	-	+	+	+	+	+	0
Thermoplastics																						
SKF Ecotal	POM-C (Acetal)	black	-50 (-60)	+100 (+210)	n.a.	82	YES	n.d.a.	YES	YES	-	0	0	0	+	-	-	+	+	+	+	+
728	POM-C (Acetal)	white	-50 (-60)	+100 (+210)	n.a.	85	YES	YES	YES ⁴⁾	YES	-	0	0	0	+	-	-	+	+	+	+	+
729	PET	white	-20 (-5)	+115 (+240)	n.a.	87	YES	YES	YES ⁴⁾	YES	0	-	+	+	+	-	-	+	+	+	+	+
SKF Ecopaek	PEEK	cream	-100 (-150)	+260 (+500)	n.a.	87	YES	YES	YES	+	+	+	+	+	+	+	+	+	+	+	+	+
SKF Ecoflon 1	Virgin, unfilled PTFE	white	-200 (-330)	+260 (+500)	n.a.	57	YES	n.d.a.	YES	YES	+	+	+	+	+	+	+	+	+	+	+	+
700	Virgin, unfilled PTFE	white	-200 (-330)	+260 (+500)	n.a.	56	YES	n.d.a.	YES ⁴⁾	YES	+	+	+	+	+	+	+	+	+	+	+	+
SKF Ecoflon 5	Modified PTFE	white	-200 (-330)	+260 (+500)	n.a.	59	YES	YES	YES ⁴⁾	YES	+	+	+	+	+	+	+	+	+	+	+	+
777	Modified PTFE	white	-200 (-330)	+260 (+500)	n.a.	60	YES	YES	YES ⁴⁾	YES	+	+	+	+	+	+	+	+	+	+	+	+
SKF Ecoflon 14	PTFE (+ 10% Ekonol)	tan	-200 (-330)	+260 (+500)	n.a.	57	NO	n.d.a.	YES ⁴⁾	YES	n.d.a.	n.d.a.	n.d.a.	n.d.a.	+	0	0	+	+	+	+	+
754	PTFE (+ 10% Ekonol)	tan	-200 (-330)	+260 (+500)	n.a.	63	NO	NO	YES	YES	n.d.a.	n.d.a.	n.d.a.	n.d.a.	+	0	0	+	+	+	+	+
SKF Ecoflon 16	PTFE (+ 25% PEEK)	cream	-200 (-330)	+260 (+500)	n.a.	63	YES	NO	YES ⁴⁾	YES	+	+	+	+	+	+	+	+	+	+	+	+
721	PTFE (+ minerals)	white	-200 (-330)	+260 (+500)	n.a.	61	YES	n.d.a.	NO	YES	n.d.a.	n.d.a.	n.d.a.	n.d.a.	+	+	+	+	+	+	+	+
SKF Ecowear 1000	UHMWPE	white	-200 (-330)	+90 (+194)	n.a.	61	YES	YES	YES	YES	+	+	+	-	0	-	-	+	+	+	+	+
776	UHMWPE	white	-200 (-330)	+90 (+194)	n.a.	64	YES	YES	YES ⁴⁾	YES	+	+	+	-	0	-	-	+	+	+	+	+
795	UHMWPE	white	-200 (-330)	+100 (+210)	n.a.	64	YES	YES	YES ⁴⁾	YES	+	+	+	-	+	0	-	+	+	+	+	+
										+ Resistant	YES	Compliant	n.d.a.	No data available								
										0 Limited resistance	NO	Not compliant	n.a.	Not applicable								
										- Not recommended												

Material	Characteristics and applications
Thermoplastic elastomers	
H-ECOPUR	These wear-resistant materials enable self-activating solutions in applications with high pressures and temperatures up to 110°C (230°F).
H-ECOPUR	A polyurethane grade with outstanding chemical resistance.
H-ECOPUR 95A-NC	Version of H-ECOPUR in its natural colouring.
H-ECOPUR 95A-blue	A blue-coloured version of H-ECOPUR; recommended for F&B applications for its detectability.
ECOPUR 95A-bl-FG	A special blue-coloured polyurethane grade with excellent low-temperature properties.
H-ECOPUR 85A	Only suitable for special applications that require low hardness.
Elastomers	
SKF Ecorubber-H 85A-b-FG	Elastomer materials are recommended for higher temperature applications with chemical resistance requirements that polyurethanes cannot meet.
SKF Ecorubber-2 85A-w-FG	An HNBR grade with good mechanical properties and wear resistance.
SKF Ecorubber-3 85A-w-FG	An FKM grade with outstanding temperature and chemical resistance.
SKF Ecorubber-3 85A-b-FG	Recommended for steam applications; not compatible with animal or vegetable oils/fats.
SKF Ecorubber-3 85A-b-FG	Recommended for steam applications; not compatible with animal or vegetable oils/fats.
SKF Ecosil	Offers excellent low-temperature behaviour; used primarily in static applications.

Material	Characteristics and applications
Thermoplastics	
SKF Ecotal	Thermoplastics operate with less friction and wear than elastomers and thermoplastic elastomers; thermoplastic seals require metal or elastomer springs/energizers.
728	A high-strength plastic material used primarily for bushings and plastic parts that require improved physical properties.
729	Essentially SKF Ecotal in its natural colouring.
SKF Ecopaek	A technical thermoplastic material comparable to SKF Ecotal and 728, but with better dimensional stability and lower sliding wear.
SKF Ecoflon 1, 700	A high performance material with significantly improved chemical resistance, higher operating