



RAMPF[®]
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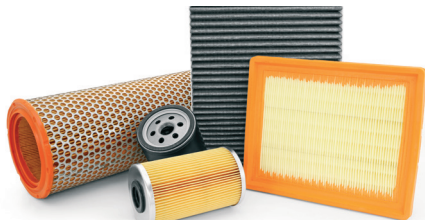
Innovative solutions | **Assembly Adhesives**



Sandwich
bonding



Household
appliances



Filter



Automotive and
transportation



Grinding and
abrasives



Wood and
furniture



2-Component PU Adhesives

RAKU® PUR	49-3000	49-3000-90	49-3010	49-3020	49-3022
Color	beige	beige	anthracite	beige	beige
A / B Component	49-3000 A 49-2030 B	49-3000-90 A 49-2030 B	49-3010 A 49-2011 B	49-3020 A 49-2010 B	49-3022 A 49-2010 B
Mixing ratio A : B [by weight]	100 : 17	100 : 17	100 : 25	100 : 20	100 : 20
Viscosity ¹⁾ (A-Component) [mPas]	paste-like	paste-like	8,000	14,000	14,000
Viscosity (A : B Mixture) [mPas]	paste-like	paste-like	2,000	9,000	9,000
Density ²⁾ [g/cm ³]	1.65	1.65	1.58	1.48	1.45
Pot life ³⁾ [min] at 20 °C	60	90	6	11	40
Open time at 20 °C [min]	40	60	25	30	80
Hardness [Shore D]	80	80	80	67	70
Tensile shear strength ⁴⁾ [MPa]	9 (AlMg1)	9 (AlMg1)	11 (AlMg1) 6 (HPL)	16 (HPL) 8 (AlMg1)	15 (HPL) 11 (AlMg1)
Characteristics	> sag resistance > broad adhesion spectrum	> sag resistance > broad adhesion spectrum	> low viscosity > short pot life > good adhesion to laminate	> medium viscosity > universally applicable	> medium viscosity > long open time > universally applicable

RAKU® PUR	49-3050	49-3060-150	49-3060-40	49-3060-5	49-3070
Color	beige	beige	beige	beige	beige
A / B Component	49-3050 A 49-3050 B	49-3060-150 A 49-2030 B	49-3060-40 A 49-2030 B	49-3060-5 A 49-2030 B	49-3070 A 49-2030 B
Mixing ratio A : B [by weight]	100 : 25	100 : 20	100 : 20	100 : 20	100 : 15
Viscosity ¹⁾ (A-Component) [mPas]	350,000	20,000	20,000	20,000	120,000
Viscosity (A : B Mixture) [mPas]	100,000	10,000	10,000	10,000	70,000
Density ²⁾ [g/cm ³]	1.52	1.50	1.50	1.50	1.78
Pot life ³⁾ [min] at 20 °C	30 (with 62,5 g)	150	40	5	90
Open time at 20 °C [min]	30	240	120	15	130
Hardness [Shore D]	72	67	67	67	70
Tensile shear strength ⁴⁾ [MPa]	11 (AlMg1)	8 (PVC) 6 (ABS) 11 (Stainless steel)	8 (PVC) 6 (ABS) 11 (Stainless steel)	8 (PVC) 6 (ABS) 11 (Stainless steel)	7 (PVC) 4 (ABS)
Characteristics	> sag resistance > good adhesion to metal	> medium viscosity > long processing time > good adhesion to aluminium/wood	> medium viscosity > good adhesion to aluminium/wood	> medium viscosity > good adhesion to aluminium/wood	> high viscosity > long pot life > universally applicable

RAKU® PUR	49-3080	49-3100	49-3100	49-3101	50-2600-1
Color	blue	red	grey	grey	black
A / B Component	49-3080 A 49-2080 B	49-3100 A 49-2010 B	49-3100 A 49-2010 B	49-3101 A 49-2010 B	50-2600-1 A 50-2600 B
Mixing ratio A : B [by weight]	100 : 60	100 : 22	100 : 20	100 : 45	100 : 35
Viscosity ¹⁾ (A-Component) [mPas]	1,700	9,000	9,000	4,000	3,000
Viscosity (A : B Mixture) [mPas]	1,800	3,000	3,000	2,500	2,000
Density ²⁾ [g/cm ³]	1.09	1.53	1.53	1.16	1.40
Pot life ³⁾ [min] at 20 °C	8 (with 125 g)	30	40	45	7
Open time at 20 °C [min]	40	60	60	30	15
Hardness [Shore D]	70	67	67	77	80
Tensile shear strength ⁴⁾ [MPa]	7 (PVC)	10 (AlMg1)	10 (AlMg1)	-	-
Characteristics	> good adhesion to PVC > spray application	> casting and coating material	> casting and coating material	> coating and sealing material	> casting material > hard

1-Component PU Adhesives

RAKU® PUR	49-2050	49-2060	49-2090
Color	brown	clear	grey
Viscosity ¹⁾ [mPas]	3,000	2,000	400,000
Density [g/cm ³]	1.10	1.10	1.45
Open time at 23 °C [min]	20	60	15
Pressing time at 20 °C [min]	60	60	60
Final strength [d]	3	3	3
Characteristics	> long open time > foams slightly	> DIN EN 204-D4 > WATT 91	> bonding of small areas > universal adhesion > non-sagging stripe

Reactive Hotmelts

RAKU® MELT	46-4600	46-4610
Viscosity [mPas] at 130 °C	8,000	10,000
Open time at 20 °C [min]	10	2
Initial strength	good	very high
Application	roller spraying slot die	roller spraying
Characteristics	> standard type > universally applicable	> very fast physical setting

2-Component Epoxy Reaction Adhesives, curing at room temperature

RAKU® POX	49-2221-1	49-2225
Color	beige	beige
A / B Component	49-2221-1 A 49-2221-1 B	49-2225 A 49-2225 B
Mixing ratio A : B [by weight]	100 : 60	100 : 25
Viscosity (A-Component) [mPas]	30,000	18,000
Viscosity (B-Component) [mPas]	27,000	2,300
Mixture consistency	thixotropic	fluid
Density (A-Component) [g/ml]	1.17	1.24
Density (B-Component) [g/ml]	1.0	1.0
Pot life [min] 500 ml, 25 °C	70	5-7
Open time [min]	150	5
Initial strength [h]	16	16
Hardness [Shore D]	83	65
Tensile shear strength ⁴⁾ (AIMg1) [MPa]	7	> 20
Characteristics	> long pot life > good adhesion to metal	> short pot life > good adhesion to aluminum and metal > high temperature resistance

1) Rheometer, plate, plate, 20 °C

2) Mixture density (A : B)

3) Adjustable as necessary

4) DIN EN 1465



2-Component Silicone Adhesives and Sealants

RAKU® SIL	37-1001	47-1401	47-1402
Color	white	light grey	black
A / B Component	37-1001 A 37-1001 B	47-1401 A 47-1401 B	47-1402 A 47-1402 B
Mixing ratio A : B [by weight]	100 : 100	100 : 10	100 : 10
Viscosity (A-Component) [mPas]	100,000	paste-like	paste-like
Viscosity (B-Component) [mPas]	90,000	paste-like	paste-like
Mixture consistency	thixotropic	paste-like	paste-like
Density (A-Component) [g/ml]	1.10	1.37	1.37
Density (B-Component) [g/ml]	1.10	1.03	1.03
Pot life [min] 100 g, 20 °C	> 180	–	–
Curing time	5-10 minutes at 80-120 °C	complete after 1-3 days at room temperature	complete after 1-3 days at room temperature
Open time [min]	several hours	< 5	< 5
Hardness [Shore A]	30	38	38
Tensile strength ⁵⁾ [MPa]	5.0	1.7	1.7
Breaking elongation ⁵⁾ [%]	500	200	200
Characteristics	> addition curing > universal adhesion > high heat and chemical resistance	> condensation curing > universal adhesion also to metals	> condensation curing > universal adhesion also to metals

5) DIN 53504 / DIN EN ISO 527-2

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