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Product Overview Foam Gaskets

	RAKU-SIL®		RAKU-PUR®			
	12-S 10/1-7	**12-S 10/13-8**	**31-3131-1**	**31-3151**	**31-3156**	**32-3250**
Type	thixotropic	half thixotropic	2C PU liquid	2C PU liquid	2C PU liquid	2C PU thixotropic
Color	dark grey	dark grey	black	black	black	black
Mixing ratio A:B [per weight]	100 : 100	100 : 100	100 : 18.2	100 : 13.0	100 : 16.7	100 : 22.2
Viscosity A component [mPa*s]	50,000 – 70,000	8,000 – 12,000	2,000 – 4,000	1,000 – 3,000	2,500 – 3,500	70,000 – 100,000
Density (foamed in 30 ml beaker) [g/l]	250 – 350	250 – 350	260 – 290	260 – 300	190 – 240	200 – 240
Cream time [sec]	120 – 160	60 – 150	35 – 45	45 – 60	30 – 40	20 – 30
Tack-free time [min]	6 – 10	6 – 10	5 – 8	3 – 6	3 – 7	2 – 4
Hardness (foamed in 30 ml beaker) [Shore 00]	35 – 50	40 – 55	40 – 50	30 – 35	35 – 40	45 – 50
Compression Set at 70°C [%]	5 (at 120°C)	4 (at 120°C)	approx. 3	24 – 28	approx. 2	10 – 12
Compression Set at 90°C [%]	11 (at 150°C)	9 (at 150°C)	approx. 10	–	approx. 6	18 – 20
Water Absorption [% Mass increase]	0.30	0.10	approx. 6	6 – 8	approx. 7	6 – 8
Compression Recovery [%]	99 – 100	99 – 100	99 – 100	99 – 100	99 – 100	99 – 100
Characteristics[1]	> Thixotropic foam for free-foamed sealing systems > High temperature resistance until 220°C, flexible until -40°C > Hydrophobic > High chemical resistance > UV-stable	> Liquid foam for application in grooves > High temperature resistance until 220°C, flexible until -40°C > Hydrophobic > High chemical resistance > UV-stable	> Liquid foam for application in grooves > Excellent mechanical properties: tensile strength 0.41 MPa > Tough skin > Low water absorption > Good compression set	> Liquid foam for application in grooves > Wide range of hardness by different mixing ratios > Low compression hardness > Low assembling force	> Liquid foam for application in grooves > Very soft > Low foam density > Low water absorption > Very good compression set at higher temperatures	> Fast curing > High viscosity for complex 3D geometries > Low compression hardness > High tensile strength
Approvals	UL 50 + UL 50E, UL 157, UL 508	UL 50 + UL 50E, UL 157, UL 508	UL 50 + UL 50E	UL 50 + UL 50E	–	UL 50 + UL 50E
Applications	Enclosures, Lighting Outdoor, Off-Shore, Abrasive environment	Enclosures, Lighting Outdoor, Off-Shore, Abrasive environment	Electrical housing Lighting	Electrical housing Lighting	Lighting Automotive applications	Enclosures Automotive (door modules, water box, others)
References	–	–	–	–	BMW	DAG Ford Chrysler

(1) The use of non-abrasive fillers enables the processing to be carried out using standard two-component mixing and metering facilities. All products are RoHS conform.

	RAKU-PUR®					
	32-3250-8	**32-3250-11**	**32-3250-22**	**32-3250-36**	**32-3266-2**	**32-3275-5**
Type	2C PU thixotropic	2C PU thixotropic	2C PU thixotropic	2C PU thixotropic	2C PU thixotropic	2C PU thixotropic
Color	black	black	black	black	black	black
Mixing ratio A:B [per weight]	100 : 13.3	100 : 18.2	100 : 20.0	100 : 20.0	100 : 16.7	100 : 20.0
Viscosity A component [mPa*s]	80,000 – 110,000	50,000 – 80,000	50,000 – 75,000	40,000 – 60,000	40,000 – 70,000	50,000 – 80,000
Density (foamed in 30 ml beaker) [g/l]	280 – 320	220 – 260	170 – 200	170 – 220	160 – 200	250 – 300
Cream time [sec]	40 – 50	35 – 45	30 – 40	40 – 60	40 – 55	30 – 45
Tack-free time [min]	7 – 9	6 – 10	3 – 5	2 – 5	4 – 8	5 – 10
Hardness (foamed in 30 ml beaker) [Shore 00]	40 – 50	45 – 55	30 – 40	25 – 40	30 – 45	40 – 50
Compression Set at 70°C [%]	–	–	approx. 17	approx. 9	approx. 8	approx. 3
Compression Set at 90°C [%]	approx. 9	approx. 20	approx. 14	approx. 12	approx. 9	approx. 9
Water Absorption [% Mass increase]	approx. 9	approx. 9	approx. 5	approx. 6	approx. 13	approx. 5
Compression Recovery [%]	99 – 100	99 – 100	99 – 100	99 – 100	99 – 100	99 – 100
Characteristics(1)	> Very good compression set at higher temperatures > Good adhesion on coated metal sheets > Low compression hardness	> Universal PU foam for a broad range of applications in automotive and general industry > Good adhesion on coated surfaces > Low compression hardness	> Very good sealing properties at very low density > Low water absorption > Low compression hardness	> Fast curing material > **RAKU SPEED Technology** > Very good sealing properties at very low density > Low compression hardness > Very good compression set > Very low water absorption	> Very economic PU foam with low density and wide application window > Good adhesion on metal surfaces > Low compression hardness	> Very low water absorption at freezing temperatures > Very tough skin > Low compression hardness > Low water absorption
Approvals	UL 50 + UL 50E	UL 50 + UL 50E	–	–	UL 50 + UL 50E	UL 50 + UL 50E
Applications	Enclosures Lighting Solar inverter housings	Enclosures Automotive (door modules, others)	Automotive (door modules)	Automotive (door modules)	Enclosures	Various applications
References	–	BMW Hyundai KIA	VW / Porsche Volvo Fiat	FORD DAG	–	–

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2-3-010/4EN. Errors excepted. Subject to change.

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