

**Tailor-made polyurethane systems:** No matter if you use our polyurethane systems as basic material for construction or to protect or fix devices and construction parts – there is one thing all RAKU-PUR systems have in common: they meet highest physical and chemical requirements. These systems are precisely adjusted to your individual needs. Challenge us!

## Your advantages:

### Excellent physical and chemical properties:

- » High adhesive force on various materials: e.g. aluminum, steel, polymers, wood
- » High mechanical strength
- » High accuracy thanks to low shrinkage
- » Good shock absorbing characteristics (damping behaviour)
- » Systems with internal release-agents available
- » High resistance to chemicals and moisture

### Individually adjustable:

- » Precisely adapted fluidity
- » UV-resistance possible
- » Flame protection (e.g. B 1, B 2, S 3, S 4)
- » Individual hardness grade (Shore A 35 – Shore D 90)
- » Great colour variety
- » Curing-time can be varied from a few seconds to a few hours
- » Suitable for casting by hand or dispensing machines

Required characteristics \ RAKU-PUR system for	Edge-casting	Casting of filters, grinding and polishing materials	Clear Casting 3 D labels (doming), LED, decoration	Casting of construction parts	Casting of concrete-moulds
Mechanical resistance (absorption of impact-, shock- and tear-forces)	■	■		■	■
Low shrinkage	■	■		■	■
Good fluidity	■	■	■	■	■
Good adhesion on substrate	■	■	■		
Low water-absorption	■		■	■	■
Resistance to chemicals	■	■		■	
UV-resistance	■		■		

## RAMPF Giessharze worldwide.



### **RAMPF Group Japan, K. K.**

Oriental Shin-Osaka Building 2F  
Nishinakajima 7-1-26, Yodogawa-ku  
Osaka, 532-0011, Japan  
T +81 (0) 66101-0769  
F +81 (0) 66101-0770  
E [info@rampf-group.jp](mailto:info@rampf-group.jp)  
[www.rampf-group.jp](http://www.rampf-group.jp)

### **RAMPF Group, Inc.**

P.O. Box 930 352  
50714 Century Ct.  
Wixom, Mi 48393, USA  
T +1 (248) 295 0223  
F +1 (248) 295 0224  
E [info@rampf-group.com](mailto:info@rampf-group.com)  
[www.rampf-group.com](http://www.rampf-group.com)

### **Service worldwide:**

Further distributors can be found under  
[www.rampf-giessharze.de](http://www.rampf-giessharze.de)

### **RAMPF (Taicang) Ltd.**

Taicang Economy Development Area  
No. 8 North Lou Jiang Road,  
Taicang 215400, Jiangsu Province  
P.R.China  
T +86 (0) 512 5328 5051  
F +86 (0) 512 5328 5060  
E [info@rampf-group.com.cn](mailto:info@rampf-group.com.cn)  
[www.rampf-group.com.cn](http://www.rampf-group.com.cn)

Headquarters

**RAMPF Giessharze GmbH & Co. KG**

Albstraße 37

D-72661 Grafenberg, Germany

T +49 (0) 7123 9342-0

F +49 (0) 7123 9342-2444

E [info@rampf-giessharze.de](mailto:info@rampf-giessharze.de)

[www.rampf-giessharze.de](http://www.rampf-giessharze.de)



**RAMPF®**

discover the future

## RAKU-PUR® Polyurethane Systems

Quality meets creativity:  
Polyurethane Systems for your versatile world of ideas.



**RAMPF®**  
discover the future

# **RAKU-PUR® Polyurethane Systems**

Individual solutions for creative ideas



RAKU-PUR	Hardness (Shore)		Pot life (Min.)	Density (g/ml)	Viscosity A-component at 20 °C (mPA·s)	Viscosity B-component at 20 °C (mPA·s)	Mixing ratio A:B (weight-%)	Elongation at break (%)	Tensile strength (MPa)	Special properties
	D	A								

### Applications with RAKU-PUR Polyurethane Systems: Choice of products

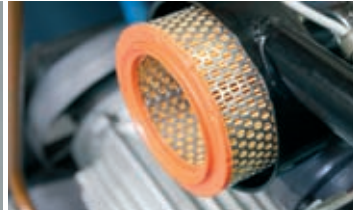
80-2624		45 – 50	5:30	1.09 – 1.12	1,000 – 1,400	600 – 1,000	100:32	n.a.	n.a.	» Accreditation for dry food-stuff (meets the requirements of the decree of articles of daily use for polyurethanes category 3)
80-2618-1		55 – 62	3:45	1.10 – 1.13	1,100 – 1,400	180 – 220	100:28	170	3 – 4	» Soft system » High flexibility and elasticity » High tear-resistance
▲ 50-2628		55 – 60	7:00	1.13 – 1.17	10,000 – 15,000	150 – 250	100:40	n.a.	n.a.	» Absolutely light- and UV-resistant » Suitable for outdoor applications » Transparent, Crystal-clear » <b>Mercury-free (RoHS-conformity)</b>
80-2613		70	3:00	1.11 – 1.14	1,000 – 1,500	600 – 1,000	100:40	185	7.1	» High tear resistance » Despite low hardness very good chemical resistance
▲ 50-2627		73 – 78	5:00	1.08 – 1.12	1,400 – 2,000	2,900 – 4,500	100:71	n.a.	n.a.	» Absolutely light- and UV-resistant » Crystal-clear » High hydrolysis-resistance » Suitable for outdoor-applications » High tear-resistance » <b>Mercury-free (RoHS-conformity)</b>
50-2625-3		75 – 80	5:15	1.32 – 1.34	2,000 – 2,500	300 – 400	100:24	n.a.	n.a.	» Tough-elastic system » Sound-and vibration-absorbing properties
80-2615-1		82 – 87	3:45	1.12 – 1.15	1,100 – 1,400	180 – 220	100:46	150	13 – 16	» Tough-elastic system » Good flow characteristics » High tear-resistance
▲ 50-2464	53 – 58		7:00	1.09 – 1.12	3,000 – 5,000	2,900 – 4,500	100:116	n.a.	n.a.	» Absolutely light- and UV-resistant » Crystal-clear » High hydrolysis-resistance » Suitable for outdoor-applications » <b>Mercury-free (RoHS-conformity)</b>
55-2172-1	60 – 65		2:15	1.18 – 1.20	30,000 – 40,000	300 – 400	100:30	n.a.	n.a.	» Universal casting resin to fix polishing fleeces » Chemically thixotropic » <b>rheology is adjustable by variation of stirrer speed</b>
70-2331	70 – 75		2:00	1.22 – 1.26	1,700 – 2,100	800 – 1,000	100:61	n.a.	n.a.	» Lightstable » High impact strength » High resistance against mechanical influences
70-2359	70 – 80		2:00	1.35 – 1.40	3,000 – 4,000	1,250 – 1,750	100:47	n.a.	n.a.	» Lightstable » High impact strength » <b>Flame-retardant fire class S 3</b> (suitable for train-interior) » A-component highly filled
70-2346	70 – 75		1:50	1.18 – 1.21	2,800 – 3,500	2,900 – 4,000	100:80	n.a.	n.a.	» Lightfast » High impact strength » Very high resistance against mechanical impacts » A-component slightly filled
▲ 80-2464	75 – 80		2:45	1.47 – 1.51	10,000 – 11,000	30 – 40	100:30	n.a.	n.a.	» <b>Extraordinary fast potting of both end-plate sides of hydraulic- and oil-filters</b> » High chemical resistance » Good adhesion on PA and steel » <b>Retarded thixotropic behaviour</b> (ca. 20 s)
50-2458	75 – 80		4:00	1.14 – 1.18	1,500 – 2,000	180 – 220	100:91	42	46	» Very high impact strength » High flexural strength » For prototype parts
50-2420	80		2:30	1.15 – 1.19	1,600 – 2,000	300 – 400	100:97	20	47	» <b>High heat deflection temperature</b> » High impact strength » High resistance against mechanical influences (e.g. vibration) » For construction parts with thin walls
70-2355-1	80 – 85		5:00	1.53 – 1.58	9,000 – 11,000	300 – 400	100:23	n.a.	n.a.	» Not lightfast » High impact strength » Low shrinkage » A-component highly filled
50-2404	85	15 – 17	1.24 – 1.28	1,100 – 1,500	300 – 400	100:50	n.a.	n.a.	» Suitable for hard construction parts and potting of endplates of oil filters and hydraulic filters » Long pot life (suitable for hand-casting) » Low shrinkage » A-component filled	
55-2110	83 – 86		2:25	1.48 – 1.50	56,000 – 60,000	1,000 – 1,350	100:45	3 – 3.5	55 – 60	» For Fixing of grinding linen with high dynamic forces (high rotation speed) » <b>High heat deflection temperature</b> » High flexural strength » Fast curing » High hydrolytic resistance » Low water absorption
55-2147	87 – 92		6	1.54 – 1.56	15,000 – 17,000	300 – 400	100:35	4 – 5	50 – 60	» Universal casting resin to fix grinding-linen and Polyamide-brushes » <b>High heat deflection temperature</b> » High flexural strength » Curing with low shrinkage » High hydrolytical stability » Low water absorption
80-2434	87		2:40	1.55 – 1.60	11,500 – 17,500	300 – 400	100:25	4	46	» Casting resin for Industrial- and oil/hydraulic filters » High chemical resistance » High tensile and flexural strength
80-2638		40 – 50	20	1.1	1,000 – 1,300	9,000 – 11,000	100:220	> 800	5 – 6	» Good mechanical characteristics » High tear strength » Low shrinkage » B-component consists of TDI-prepolymer
80-2637		60 – 70	15	1.1	1,000 – 1,300	9,000 – 11,000	100:200	> 700	7 – 8	» Good mechanical properties » High tear strength » Low shrinkage » B-component consists of TDI-prepolymer
80-2636		93	04:30	1.1	700 – 900	7,000 – 9,000	100:530	350 – 400	20	» Fast and tough-elastic polyurea-elastomer » <b>Very high tear strength</b>
33-1024-3		10 – 15	–	0.25 – 0.3	1,200 – 1,800	500 – 700	100:50	n.a.	n.a.	» Soft integral-skin foam » Fast demoulding » Hydrophobic and due to that low water absorption » High chemical resistance
80-3017		20	–	0.4 – 0.45	1,300 – 1,600	180 – 220	100:36	n.a.	n.a.	» Soft microcellular integral-skin foam » Fast demoulding » High elasticity
80-3018		50 – 60	–	0.5 – 0.6	800 – 1,300	180 – 220	100:50	n.a.	n.a.	» Semi-rigid microcellular integral-skin foam » High elasticity
80-3019	70		–	0.18	1,250 – 1,650	150 – 210	100:140	8	20	» Hard microcellular integral foam » Good flow characteristics » High heat deflection temperature » For manufacturing of frame parts

▲ New products

■ Especially suitable for this application, for further applications in edge casting, please see special brochure „Resins for Edge Casting“

## You couldn't find an appropriate product? Call us, we will find a customized solution for you!

Our recommendations on the use of the material are based on many years of experience and current scientific and practical knowledge. They are, however, provided without any obligation on our part and do not relieve the buyer of the need for suitability tests. They do not constitute a legal relationship, nor are any protected third party rights whatsoever affected thereby. No liability accepted for misprints.



» **Edge casting**  
Good adhesion on wood, UV-stable, impact and scratch resistance

» **Filter frames / endplate**  
Good adhesion on filter, high chemical and mechanical resistance

» **Transport systems for sensitive parts like windshields, engine bonnets etc.**  
High mechanical resistance

» **Grinding and polishing materials**  
Good adhesion, high mechanical strength

Soft casting resins			■				
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Rigid casting resins		■					■
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Elastomers					■	■	
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Foamed systems			■				
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» **Clear Casting of 3-D labels (doming) and LED**  
UV- and light-resistant  
Absolutely clear material

» **Construction parts**  
High impact strength, low shrinkage and tension

» **Concrete moulds**  
High elongation, low water-absorption

» **Noise and vibration damping, filling of cavities**  
Good adhesion

