

RAKU-TOOL® Boards

	RAKU-TOOL SB-0080	RAKU-TOOL SB-0140	RAKU-TOOL SB-0240	RAKU-TOOL SB-0301	RAKU-TOOL SB-0351
	Styling Boards				
Color	off-white	light green	apricot	apricot	apricot
Density (ISO 1183) g/cm³ ca.	0.08	0.14	0.24	0.35	0.35
Applications	> Design study > Program proving > Supporting structures for Close Contour Pastes > Negative molds for casting	> Design study > Program proving > Supporting structures for Close Contour Pastes > Negative molds for casting	> Styling models > Epoxy laminating molds > Supporting structures for Close Contour Pastes > Negative molds for casting	> Styling & Design models > Molds for laminating parts	> Styling & design models > Supporting structures for Close-Contour Pastes > Molds for laminating parts
Key Properties	> Very light weight and smooth surface > Easily shaped and good chip formation > Good heat resistance > Resistant to organic solvents	> Light weight and smooth surface > Easily shaped, low dust > Resistant to organic solvents	> Good surface structure > Easily shaped and machined > Resistant to organic solvents	> Fine surface structure > Easily shaped and machined, low dust	> Fine surface structure > Easily shaped and machined, low dust
Hardness (ISO 868) Shore D	–	–	–	–	–
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹	–	–	60 – 70	65 – 70	45 – 50
Deflection temperature (ISO 75) °C	–	–	55 – 65	55 – 65	60 – 70
Compressive strength (ISO 604) MPa	0.7	1.8 – 2	2 – 4	6 – 8	8 – 12
Flexural strength (ISO 178) MPa	–	–	5 – 6	7 – 9	8 – 12
Dimensions mm (Length x Width x Height)	2500 x 1200 x 100 2500 x 1200 x 200 2500 x 1200 x 300 2500 x 1200 x 400	2000 x 1000 x 100 2000 x 1000 x 200 2000 x 1000 x 300 2000 x 1000 x 400	1500 x 500 x 50 1500 x 500 x 100 1500 x 500 x 200 2000 x 1000 x 50 2000 x 1000 x 100 2000 x 1000 x 200	2000 x 1000 x 100 2000 x 1000 x 200	1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200
Bonding with RAKU-TOOL		> EP-2305/EH-2904-1	> EP-2305/EH-2904-1	> EP-2305/EH-2904-1	> EP-2305/EH-2904-1
Mix ratio (pbw)	–	100 : 30	100 : 30	100 : 30	100 : 30
Color		apricot	apricot	apricot	apricot
Pot life 500 ml (min)		25	25	25	25
Minimum curing time (h)		16	16	16	16
Repair with RAKU-TOOL		> UP-4301/UH-4901	> UP-4301/UH-4901	> UP-4301/UH-4901	> UP-4301/UH-4901
Mix ratio (pbw)	–	100 : 1 – 3	100 : 1 – 3	100 : 1 – 3	100 : 1 – 3
Color		apricot	apricot	apricot	apricot
Pot life (min)		4 – 6	4 – 6	4 – 6	4 – 6
Minimum curing time (min)		25 – 30	25 – 30	25 – 30	25 – 30

SB = Styling Board | MB = Modeling Board | WB = Working Board. Special sizes available on request.

	RAKU-TOOL SB-0470	RAKU-TOOL MB-0600	RAKU-TOOL MB-0670	RAKU-TOOL MB-0720	RAKU-TOOL WB-0801
	Styling Boards	Modeling Boards			Working Boards
Color	apricot	brown	brown	brown	gray
Density (ISO 1183) g/cm³ ca.	0.47	0.60	0.67	0.72	0.80
Applications	> Styling models > Master models and data control models	> Master models, Cubing models, Patterns	> Master models, Cubing models, Patterns	> Master models, Cubing models, Patterns	> Master models > Cubing models > Tooling Jigs and Fixtures > Vacuum forming tools
Key Properties	> Very good surface structure > Easily machined	> Fine surface structure > Easily shaped and machined > Low coefficient of thermal expansion > Good dimensional stability	> Fine surface structure > Easily shaped and machined > Low coefficient of thermal expansion > Good dimensional stability	> Excellent surface structure > Low coefficient of thermal expansion > Good dimensional stability > Good compressive and flexural strength	> Fine surface structure > High HDT and very low CTE > Good dimensional stability > Good compressive and flexural strength
Hardness (ISO 868) Shore D	–	50 – 55	60 – 65	60 – 65	65 – 70
Coefficient of thermal expansion (ISO 11359) 10 ⁻⁶ K ⁻¹	60 – 65	50 – 55	50 – 55	50 – 55	45 – 50
Deflection temperature (ISO 75) °C	60 – 70	70 – 75	75 – 80	75 – 80	85 – 90
Compressive strength (ISO 604) MPa	10 – 15	15 – 20	15 – 20	20 – 25	40 – 45
Flexural strength (ISO 178) MPa	10 – 15	15 – 20	20 – 25	25 – 30	35 – 40
Dimensions mm (Length x Width x Height)	1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200	1500 x 500 x 25 1500 x 500 x 30 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200	1500 x 500 x 25 1500 x 500 x 30 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200	1500 x 500 x 25 1500 x 500 x 30 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200	1500 x 500 x 25 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100
Bonding with RAKU-TOOL	> EP-2305/EH-2904-1	> EP-2306/EH-2904-1	> EP-2306/EH-2904-1	> EP-2306/EH-2904-1	> EP-2306/EH-2904-1
Mix ratio (pbw)	100 : 30	100 : 30	100 : 30	100 : 30	100 : 30
Color	apricot	brown	brown	brown	brown
Pot life 500 ml (min)	25	35	35	35	35
Minimum curing time (h)	16	16	16	16	16
Repair with RAKU-TOOL	> UP-4301/UH-4901	> UP-4310/UH-4900	> UP-4310/UH-4900	> UP-4310/UH-4900	> UP-4310/UH-4900
Mix ratio (pbw)	100 : 1 – 3	100 : 1 – 3	100 : 1 – 3	100 : 1 – 3	100 : 1 – 3
Color	apricot	brown	brown	brown	brown
Pot life (min)	4 – 6	4 – 6	4 – 6	4 – 6	4 – 6
Minimum curing time (min)	25 – 30	25 – 30	25 – 30	25 – 30	25 – 30

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RAKU-TOOL® Boards

	RAKU-TOOL WB-0691	RAKU-TOOL WB-0700	RAKU-TOOL WB-1000		RAKU-TOOL WB-1222		RAKU-TOOL WB-1250	
	Working Boards							
Color	light blue	light green	beige, also available in gray (WB-1001)		green		light green	
Density (ISO 1183) g/cm³ ca.	0.69	0.70	1.00		1.22		1.25	
Applications	> Lay-up tools for low temperature tooling preregs > Vacuum forming molds > Medium temperature applications	> Lay-up tools for prepreg > High temperature applications > Vacuum forming molds	> Tooling jigs > Fixtures		> Foundry pattern plates > Hammer tools > Checking fixtures for metal parts		> Foundry models > Foundry pattern plates > Foundry core boxes	
Key Properties	> Very fine surface structure > Excellent machinability > Good dimensional stability > Heat resistant up to 110°C	> Very fine surface structure > Very easily machined > Temperature resistance up to 135°C > Good dimensional stability	> Very easily machined > Low coefficient of thermal expansion > Good edge strength and abrasion resistance		> Low wear of milling tools > Resistant to amine > Most proven working board on the foundry market > Resistant to dry ice cleaning > Good abrasion resistance		> Easy to mill > Low wear of milling tools > Very good amine resistance > Very good abrasion resistance > Resistant to dry ice cleaning	
Hardness (ISO 868) Shore D	70 – 75	65 – 70	75 – 80		75 – 85		77 – 83	
Coefficient of thermal expansion (ISO 11359) 10 ⁻⁶ K ⁻¹	35 – 45	35 – 45	50 – 60		80 – 85		70 – 75	
Deflection temperature (ISO 75) °C	100 – 110	130 – 140	70 – 80		80 – 90		80 – 85	
Compressive strength (ISO 604) MPa	50 – 60	50 – 55	45 – 50		60 – 70		70 – 80	
Flexural strength (ISO 178) MPa	25 – 35	30 – 40	45 – 50		70 – 80		90 – 100	
Dimensions mm (Length x Width x Height)	1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200	1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200	1500 x 500 x 25 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100		1000 x 500 x 30 1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100		1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100	
Bonding with RAKU-TOOL	> EP-2303/EH-2934	> EP-2304/EH-2934	> PP-3310/ PH-3905	> EL-2210/ EH-2910-1*	> PP-3311/ PH-3905	> EL-2210/ EH-2910-1*	> PP-3350/ PH-3905	> EL-2210/ EH-2910-1*
Mix ratio (pbw)	100 : 20	100 : 20	100 : 50	100 : 60	100 : 50	100 : 60	100 : 50	100 : 60
Color	light blue	light green	beige	clear	green	clear	light green	clear
Pot life 500 ml (min)	80 – 90	90	5 – 8	60	5 – 8	60	5 – 8	60
Minimum curing time (h)	16	16	4	16	4	16	4	16
Repair with RAKU-TOOL	> UP-4320/UH-4920	> UP-4320/UH-4920	Repair with adhesive bonded inserts		Repair with adhesive bonded inserts		Repair with adhesive bonded inserts	
Mix ratio (pbw)	100 : 3 – 5	100 : 3 – 5						
Color	light green	light green						
Pot life (min)	4 – 6	4 – 6						
Minimum curing time (min)	25 – 30	25 – 30						
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	RAKU-TOOL WB-1258	RAKU-TOOL WB-1404	RAKU-TOOL WB-1460	RAKU-TOOL WB-1600	RAKU-TOOL WB-1700				
	Working Boards								
Color	orange	olive	light green	ivory	dark gray				
Density (ISO 1183) g/cm³ ca.	1.20	1.40	1.46	1.60	1.70				
Applications	> Pattern plates > Core boxes	> Checking fixtures for metal parts > Models and molds for polyester and composites applications > Hammer tools > Vacuum forming tools > Foundry: models, pattern plates and core boxes > Molds for low pressure RIM	> Foundry models > Foundry pattern plates	> Metal forming tools > Jigs > Fixtures	> Metal forming tools > Vacuum forming molds, jigs > Foam molds > Rapid prototyping molds				
Key Properties	> Very high abrasion resistance whilst good dimensional stability and accuracy > Homogeneous surface > High impact strength, good edge strength > Very easily machined > Excellent resistance to chemicals, no swelling	> Good styrene resistance > High compressive modulus > Good amine resistance > Good abrasion resistance > Resistant to dry ice cleaning > Can be polished > Low coefficient of thermal expansion	> Made out of recycle polyol > Resistant to amine > Resistant to dry ice cleaning > Good abrasion resistance	> Dense surface > Easily machined > Low coefficient of thermal expansion > Very good compressive strength	> Very dense surface structure, can be polished > Easily machined > Good temperature resistance > Excellent compressive strength > High abrasion resistance				
Hardness (ISO 868) Shore D	80 – 85	85 – 90	80 – 85	85 – 90	85 – 90				
Coefficient of thermal expansion (ISO 11359) 10 ⁻⁶ K ⁻¹	70 – 75	50 – 55	65 – 75	45 – 50	45 – 50				
Deflection temperature (ISO 75) °C	70 – 75 (Tg)	75 – 80	75 – 80	75 – 80	120 – 125				
Compressive strength (ISO 604) MPa	90 – 100	85 – 95	70 – 80	90 – 100	125 – 130				
Flexural strength (ISO 178) MPa	100 – 110	80 – 90	70 – 80	55 – 65	80 – 85				
Dimensions mm (Length x Width x Height)	1000 x 500 x 30 1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100	1000 x 500 x 30 1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100	1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100	750 x 500 x 50 750 x 500 x 75 750 x 500 x 100	750 x 500 x 50 750 x 500 x 75 750 x 500 x 100				
Bonding with RAKU-TOOL	> PP-3358/ PH-3905	> EL-2210/ EH-2910-1*	> PP-3314/ PH-3905	> EL-2210/ EH-2910-1*	> PP-3311/ PH-3905	> EL-2210/ EH-2910-1*	> PP-3310/ PH-3905	> EL-2210/ EH-2910-1*	> EL-2210/EH-2910-1*
Mix ratio (pbw)	100 : 50	100 : 60	100 : 50	100 : 60	100 : 50	100 : 60	100 : 50	100 : 60	100 : 60
Color	orange	clear	olive	clear	green	clear	beige	clear	clear
Pot life 500 ml (min)	5 – 8	60	5 – 8	60	5 – 8	60	5 – 8	60	60
Minimum curing time (h)	4	16	4	16	4	16	4	16	16
Repair with RAKU-TOOL	Repair with adhesive bonded inserts		Repair with adhesive bonded inserts		Repair with adhesive bonded inserts		Repair with adhesive bonded inserts		Repair with adhesive bonded inserts
Mix ratio (pbw)									
Color									
Pot life (min)									
Minimum curing time (min)									
SB = Styling Board MB = Modeling Board WB = Working Board. * Different mix ratios for special mixtures see technical data sheet.									

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