

RAKU-TOOL® Boards	RAKU-TOOL SB-0064		RAKU-TOOL SB-0096		RAKU-TOOL SB-0130		RAKU-TOOL SB-0160	
Styling and Design with RAKU-TOOL								
Color	beige		aqua		light yellow		light gray	
Density (ISO 1183) g/cm³ lb/ft³ (ca.)	0.064 4.0		0.096 6.0		0.13 8.0		0.16 10.0	
Applications	<ul style="list-style-type: none"> > Design studies > CNC program checking > Supporting structures for tooling pastes > Negative mold for casting 		<ul style="list-style-type: none"> > Design studies > CNC program checking > Supporting structures for tooling pastes > Negative mold for casting 		<ul style="list-style-type: none"> > Design studies > CNC program checking > Supporting structures for tooling pastes > Negative mold for casting 		<ul style="list-style-type: none"> > Styling & design models > Data control models > Supporting structures for Close Contour Paste 	
Key Properties	<ul style="list-style-type: none"> > Very light weight with good surface > Easily shaped > Good heat resistance > Resistant to organic solvents 		<ul style="list-style-type: none"> > Very light weight with good surface > Easily shaped > Good heat resistance > Resistant to organic solvents 		<ul style="list-style-type: none"> > Very light weight with good surface > Easily shaped > Good heat resistance > Resistant to organic solvents 		<ul style="list-style-type: none"> > Light weight and smooth surface > Easily shaped, low dust > Resistant to organic solvents 	
Hardness (ISO 868) Shore D	–		–		–		–	
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹ in/in/°F x 10⁻⁶	ca. 33 ca. 18		ca. 33 ca. 18		ca. 33 ca. 18		25 – 35 14 – 19	
Deflection temperature (ISO 75) °C °F	–		–		–		–	
Compressive strength (ISO 604) MPa psi	66 – 95 9,570 – 13,800		130 – 148 18,900 – 21,500		210 – 230 30,500 – 33,400		2 – 3 280 – 430	
Flexural strength (ISO 178) MPa psi	ca. 116 ca. 16,800		ca. 190 ca. 27,600		ca. 310 ca. 45,000		2 – 3 280 – 430	
Dimensions mm in	2 x 24 x 96 4 x 24 x 96 6 x 24 x 96 8 x 24 x 96 2 x 48 x 96 4 x 48 x 96 6 x 48 x 96 8 x 48 x 96 Other thicknesses are available.		2 x 24 x 96 4 x 24 x 96 6 x 24 x 96 8 x 24 x 96 2 x 48 x 96 4 x 48 x 96 6 x 48 x 96 8 x 48 x 96 Other thicknesses are available.		2 x 24 x 96 4 x 24 x 96 6 x 24 x 96 8 x 24 x 96 2 x 48 x 96 4 x 48 x 96 6 x 48 x 96 8 x 48 x 96 Other thicknesses are available.		2 x 24 x 96 4 x 24 x 96 6 x 24 x 96 8 x 24 x 96 2 x 48 x 96 4 x 48 x 96 6 x 48 x 96 8 x 48 x 96 Other thicknesses are available.	
Bonding with RAKU-TOOL	> PE-3804 > PF-3708/ PH-3978		> PE-3804 > PF-3708/ PH-3978		> PE-3804 > PF-3708/ PH-3978		> PE-3804 > PF-3708/ PH-3978	
Mixing ratio (pbw)	1 part		100 : 100		1 part		100 : 100	
Color	beige		beige		beige		beige	
Pot life (min.)	5 – 10		4 – 5		5 – 10		4 – 5	
Minimum curing time (h)	2 – 4		0.5 – 1		2 – 4		0.5 – 1	
Repair with RAKU-TOOL								
Mix ratio (pbw)	–		–		–		–	
Color								
Pot life (min)								
Minimum curing time (min)								

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

RAKU-TOOL® Boards	RAKU-TOOL SB-0240	RAKU-TOOL SB-0320	RAKU-TOOL SB-0470	RAKU-TOOL SB-0497
Styling and Design with RAKU-TOOL				
Color	light green	apricot	apricot	brown
Density (ISO 1183) g/cm³ lb/ft³ (ca.)	0.24 15.0	0.32 20.0	0.47 29.0	0.497 31.0
Applications	> Styling & design models > Data control models	> Styling & design models > Data control models	> Styling & master models	> Styling models > Master models > Data control models
Key Properties	> Good surface structure > Easily shaped and machined > Resistant to organic solvents	> Very good surface structure > Easily shaped and machined	> Very good surface structure > Easily machined	> Very fine and smooth surface structure > Easily machined > Low coefficient of thermal expansion > Good dimensional stability
Hardness (ISO 868) Shore D	–	–	–	45 – 50
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹ in/in/°F x 10⁻⁶	60 – 70 33 – 39	60 – 65 33 – 36	60 – 65 33 – 36	45 – 50 25 – 28
Deflection temperature (ISO 75) °C °F	55 – 65 130 – 150	60 – 70 140 – 158	60 – 70 140 – 158	100 – 115 212 – 239
Compressive strength (ISO 604) MPa psi	2 – 4 290 – 570	5 – 7 720 – 1,000	10 – 15 1,400 – 2,100	12 – 16 1,700 – 2,300
Flexural strength (ISO 178) MPa psi	5 – 6 720 – 850	6 – 8 850 – 1,100	10 – 15 1,400 – 2,100	17 – 19 2,500 – 2,800
Dimensions mm in	2 x 24 x 96 4 x 24 x 96 6 x 24 x 96 8 x 24 x 96 2 x 48 x 96 4 x 48 x 96 6 x 48 x 96 8 x 48 x 96 Other thicknesses are available.	2 x 24 x 96 4 x 24 x 96 6 x 24 x 96 8 x 24 x 96 2 x 48 x 96 4 x 48 x 96 6 x 48 x 96 8 x 48 x 96	50 x 500 x 1500 2.0 x 19.7 x 59.1 100 x 500 x 1500 3.9 x 19.7 x 59.1 150 x 500 x 1500 5.9 x 19.7 x 59.1 200 x 500 x 1500 7.9 x 19.7 x 59.1	2 x 48 x 96 4 x 48 x 96 6 x 48 x 96
Bonding with RAKU-TOOL	> EP-2305/EH-2904-1	> EP-2305/EH-2904-1	> EP-2305/EH-2904-1	> EP-2306/EH-2904-1
Mixing ratio (pbw)	100 : 30	100 : 30	100 : 30	100 : 30
Color	apricot	apricot	apricot	brown
Pot life (min.)	25	25	25	35
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-4310/UH-4900
Mix ratio (pbw)	100 : 1 – 3	100 : 1 – 3	100 : 1 – 3	100 : 1 – 3
Color	apricot	apricot	apricot	brown
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.				

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RAKU-TOOL® Boards	RAKU-TOOL MB-0600	RAKU-TOOL MB-0670	RAKU-TOOL MB-0720	RAKU-TOOL WB-0691
	Modeling with RAKU-TOOL			Tool Making with RAKU-TOOL
Color	brown <i>eco-friendly</i>	brown <i>eco-friendly</i>	brown <i>eco-friendly</i>	light blue
Density (ISO 1183) g/cm³ lb/ft³ (ca.)	0.60 37.5	0.67 41.8	0.72 45.0	0.69 43.1
Applications	> Master & cubing models > Patterns	> Master & cubing models > Patterns	> Master & cubing models > Patterns	> Lay-up tools for low temperature tooling prepregs, vacuum forming molds, medium temperature applications
Key Properties	> 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	> Very fine surface structure > Excellent machinability > Good dimensional stability > Heat resistant up to 90°C
Hardness (ISO 868) Shore D	50 – 55	60 – 65	60 – 65	70 – 75
Coefficient of thermal expansion (ISO 11359) 10 ⁻⁶ K ⁻¹ in/in/°F x 10 ⁻⁶	50 – 55 28 – 31	50 – 55 28 – 31	50 – 55 28 – 31	35 – 45 19 – 25
Deflection temperature (ISO 75) °C °F	70 – 75 158 – 167	75 – 80 167 – 176	75 – 80 167 – 176	100 – 110 212 – 230
Compressive strength (ISO 604) MPa psi	15 – 20 2,100 – 2,800	20 2,900	20 – 25 2,800 – 3,500	50 – 60 7,300 – 8,700
Flexural strength (ISO 178) MPa psi	15 – 20 2,100 – 2,800	20 – 25 2,900 – 3,600	25 – 30 3,500 – 4,200	25 – 35 3,600 – 5,100
Dimensions mm in	25 x 500 x 1500 1.0 x 19.7 x 59.1 50 x 500 x 1500 2.0 x 19.7 x 59.1 75 x 500 x 1500 3.0 x 19.7 x 59.1 100 x 500 x 1500 3.9 x 19.7 x 59.1 150 x 500 x 1500 5.9 x 19.7 x 59.1	25 x 500 x 1500 1.0 x 19.7 x 59.1 50 x 500 x 1500 2.0 x 19.7 x 59.1 75 x 500 x 1500 3.0 x 19.7 x 59.1 100 x 500 x 1500 3.9 x 19.7 x 59.1 150 x 500 x 1500 5.9 x 19.7 x 59.1	25 x 500 x 1500 1.0 x 19.7 x 59.1 50 x 500 x 1500 2.0 x 19.7 x 59.1 75 x 500 x 1500 3.0 x 19.7 x 59.1 100 x 500 x 1500 3.9 x 19.7 x 59.1 150 x 500 x 1500 5.9 x 19.7 x 59.1 200 x 500 x 1500 7.9 x 19.7 x 59.1	50 x 500 x 1500 2.0 x 19.7 x 59.1 75 x 500 x 1500 3.0 x 19.7 x 59.1 100 x 500 x 1500 3.9 x 19.7 x 59.1 150 x 500 x 1500 5.9 x 19.7 x 59.1 51 x 610 x 1524 2.0 x 24.0 x 60.0 76 x 610 x 1524 3.0 x 24.0 x 60.0 102 x 610 x 1524 4.0 x 24.0 x 60.0 152 x 610 x 1524 6.0 x 24.0 x 60.0 203 x 610 x 1524 8.0 x 24.0 x 60.0
Bonding with RAKU-TOOL	> EP-2306/EH-2904-1	> EP-2306/EH-2904-1	> EP-2306/EH-2904-1	> EP-2303/EH-2934
Mixing ratio (pbw)	100 : 30	100 : 30	100 : 30	100 : 20
Color	brown	brown	brown	light blue
Pot life (min.)	35	35	35	80 – 90
Minimum curing time (h)	16	16	16	16
Repair with RAKU-TOOL	> UP-4310/UH-4900	> UP-4310/UH-4900	> UP-4310/UH-4900	> UP-4320/UH-4920
Mix ratio (pbw)	100 : 1 – 3	100 : 1 – 3	100 : 1 – 3	100 : 3 – 5
Color	brown	brown	brown	light green
Pot life (min)	4 – 6	4 – 6	4 – 6	4 – 6
Minimum curing time (min)	25 – 30	25 – 30	25 – 30	25 – 30

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RAKU-TOOL® Boards	RAKU-TOOL WB-0700	RAKU-TOOL WB-0801	RAKU-TOOL WB-1223	RAKU-TOOL WB-1700
	Tool Making with RAKU-TOOL			
Color	light green	gray	red	dark gray
Density (ISO 1183) g/cm³ lb/ft³ (ca.)	0.70 43.8	0.80 50.0 <i>eco-friendly</i>	1.22 76.3	1.70 106.0
Applications	<ul style="list-style-type: none"> > Lay up tools for pre-preg > High temperature applications > Vacuum forming molds 	<ul style="list-style-type: none"> > Master models > Cubing models > Tooling jigs and fixtures > Vacuum forming tools 	<ul style="list-style-type: none"> > Foundry pattern plates > Hammer tools > Checking fixtures for metal parts 	<ul style="list-style-type: none"> > Metal forming tools > Vacuum forming molds, jigs > Foam molds, rapid prototyping molds
Key Properties	<ul style="list-style-type: none"> > Very fine surface structure > Very easily machined > Good dimensional stability > Temperature resistance up to 130° C 	<ul style="list-style-type: none"> > Fine surface structure > High HDT and very low CTE > Good dimensional stability > Good compressive and flexural strength 	<ul style="list-style-type: none"> > Low wear of milling tools > Resistant to amine > Most proven working board on the foundry market > Resistant to dry ice cleaning > Good abrasion resistance 	<ul style="list-style-type: none"> > Very dense surface structure, can be polished > Easily machined > Good temperature resistance > Excellent compressive strength > High abrasion resistance
Hardness (ISO 868) Shore D	65 – 70	65 – 70	75 – 85	85 – 90
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹ in/in/°Fx10⁻⁶	35 – 45 19 – 25	45 – 50 25 – 28	80 – 85 44 – 47	45 – 50 25 – 28
Deflection temperature (ISO 75) °C °F	130 – 140 266 – 284	85 – 90 185 – 194	80 – 90 176 – 194	120 – 125 248 – 257
Compressive strength (ISO 604) MPa psi	50 – 55 7,100 – 7,800	40 – 45 5,800 – 6,500	60 – 70 8,700 – 10,000	125 – 130 17,800 – 18,600
Flexural strength (ISO 178) MPa psi	30 – 40 4,200 – 5,700	35 – 40 5,100 – 5,800	70 – 80 10,000 – 12,000	80 – 85 11,000 – 12,000
Dimensions mm in	50 x 500 x 1500 2.0 x 19.7 x 59.1 75 x 500 x 1500 3.0 x 19.7 x 59.1 100 x 500 x 1500 3.9 x 19.7 x 59.1 150 x 500 x 1500 5.9 x 19.7 x 59.1	25 x 500 x 1500 1.0 x 19.7 x 59.1 50 x 500 x 1500 2.0 x 19.7 x 59.1 75 x 500 x 1500 3.0 x 19.7 x 59.1 100 x 500 x 1500 3.9 x 19.7 x 59.1 150 x 500 x 1500 5.9 x 19.7 x 59.1	1.2 x 20 x 40 2 x 24 x 60 3 x 24 x 60 4 x 24 x 60	50 x 500 x 750 2.0 x 19.7 x 29.5 100 x 500 x 750 3.9 x 19.7 x 29.5
Bonding with RAKU-TOOL	> EP-2304/EH-2934	> EL-2210/EH-2910-1*	> EL-2210/EH-2910-1*	> EL-2210/EH-2910-1*
Mixing ratio (pbw)	100 : 20	100 : 60	100 : 60	100 : 60
Color	light green	transparent	transparent	transparent
Pot life (min.)	90	60	60	60
Minimum curing time (h)	16	16	16	16
Repair with RAKU-TOOL	> 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			
Color	light green			
Pot life (min)	4 – 6			
Minimum curing time (min)	25 – 30			
SB = Styling Board MB = Modeling Board WB = Working Board. * Different mix ratios for special mixtures see technical data sheet.				

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