

					Items				
					HI-1070A	HI-1075A	HI-1080A	HI-1085A	HI-1090A
Physical Properties			Test Method						
Types	Ester				yes	yes	yes	yes	yes
	Ether								
Specific Gravity			JIS	K7311	1.16	1.17	1.18	1.19	1.19
Hardness	Shore A				70±2	75±2	80±2	85±2	90±2
	Shore D								
Modulus 100%	kg/cm ²		JIS	K7311	30±8	35±10	45±10	60±10	80±15
Modulus 300%	kg/cm ²		JIS	K7311	40±8	55±10	75±15	100±20	150±30
Tensile Strength kg/cm ²			JIS	K7311	160±30	200±40	300±70	350±70	350±70
Elongation	%		JIS	K7311	850±170	800±150	600±100	600±100	500±100
Vicast Softening point ℃			JIS	K7311	115	125	130	130	130
Processing	Injection				yes	yes	yes	yes	yes
	Extrusion								
Transparency	mm	5~6 m/m							
		8~10 m/m							
UV Resistance	300W/12hr	4 ⁰	ASTM	D1148					
	300W/24hr	4 ⁰	ASTM	D1184					
Characteristics					.very good tough elasticity .good abrasion resistance .good low temp. flexibility	.very good tough elasticity .good abrasion resistance .good low temp. flexibility	.very good tough elasticity .good abrasion resistance .good low temp. flexibility	very good tough elasticity .good abrasion resistance .good low temp. flexibility	.very good tough elasticity .good abrasion resistance .good low temp. flexibility
Applications					.O Rings .pads .corks .shoes .shoe soles .shoe materials .others	.O Rings .pads .corks .shoes .shoe soles .shoe materials .others	.O Rings .pads .corks .shoes .shoe soles .shoe materials .others	.O Rings .pads .corks .wrist bands for watch .shoes .auto parts .others	.pads .corks .shoes .auto parts .wheelers & parts .rollers & parts .others

					Items					
					HI-1095A	HI-2055A	HI-2060A	HI-2065A	HI-2070A	HI-2075A
Physical Properties			Test Method							
Types	Ester				yes	yes	yes	yes	yes	yes
	Ether									
Specific Gravity			JIS	K7311		1.21	1.22	1.23	1.24	1.24
Hardness	Shore A				95±2	98±2				
	Shore D					56±2	61±2	64±2	71±2	75±2
Modulus 100%	kg/cm ²		JIS	K7311	120±15	135±20	170±35	200±40	230±45	250±50
Modulus 300%	kg/cm ²		JIS	K7311	200±40	220±40	250±50	250±50	270±50	280±60
Tensile Strength kg/cm ²			JIS	K7311	350±70	350±70	350±70	350±70	350±70	350±70
Elongation	%		JIS	K7311	450±90	450±90	450±90	400±80	400±80	350±70
Vicast Softening point ℃			JIS	K7311	130	135	135	135	140	140
Processing	Injection				Yes	yes	yes	yes	yes	yes
	Extrusion									
Transparency	mm	5~6 m/m								
		8~10 m/m								
UV Resistance	300W/12hr	4 ⁰	ASTM	D1148						
	300W/24hr	4 ⁰	ASTM	D1184						
Characteristics					.very good tough elasticity .good abrasion resistance .good low temp. flexibility	.very good tough elasticity .good abrasion resistance .good low temp. flexibility	.very good tough elasticity .good abrasion resistance .good low temp. flexibility	very good tough elasticity .good abrasion resistance .good low temp. flexibility	.very good tough elasticity .good abrasion resistance .good low temp. flexibility	.very good tough elasticity .good abrasion resistance .good low temp. flexibility
Applications					.straps & buckles .wheelers & parts .rollers & parts .shoe materials .shoe hobnails .others	.straps & buckles for snowboots .antenna for TV and radio .shoe materials .others	.straps & buckles for snowboots and roller/ice skating shoes .ice skating boots .shoe tips .others	.straps & buckles for snowboots and roller/ice skating shoes .ice skating boots .shoe tips .others	.ice skating boots .shoe tips .shoe materials .others	.ice skating boots .shoe tips .shoe materials .others

					Items		
					HT-1080A	HT-1085A	HT-1090A
Physical Properties			Test Method				
Types	Ester				yes	yes	yes
	Ether						
Specific Gravity			JIS	K7311	1.18	1.19	1.19
Hardness	Shore A				80±2	85±2	90±2
	Shore D						
Modulus 100%	kg/cm ²		JIS	K7311	45±90	60±10	80±15
Modulus 300%	kg/cm ²		JIS	K7311	80±15	110±20	150±30
Tensile Strength kg/cm ²			JIS	K7311	350±70	450±90	550±110
Elongation	%		JIS	K7311	550±110	550±110	550±110
Vicast Softening point ℃			JIS	K7311	125	125	130
Processing	Injection				yes	yes	yes
	Extrusion						
Transparency	mm	5~6 m/m			yes	yes	yes
		8~10 m/m					
UV Resistance	300W/12hr	4 ⁰	ASTM	D1148			
	300W/24hr	4 ⁰	ASTM	D1184			
Characteristics					.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency
Applications					.O Rings .pads .corks .auto parts .shoe soles .shoe materials .others	.O Rings .pads .corks .rollers & parts .wrist bands for watch .shoe materials .auto parts .others	.O Rings .pads .corks .rollers & parts .wrist bands for watch .shoe materials .auto parts .others

					Items				
					HT-1095A	HT-2055A	HT-2060A	HT-2065A	HT-2070A
Physical Properties			Test Method						
Types	Ester				yes	yes	yes	yes	yes
	Ether								
Specific Gravity			JIS	K7311	1.2	1.21	1.22	1.23	1.24
Hardness	Shore A				95±2	98±2			
	Shore D					56±2	61±2	64±2	71±2
Modulus 100%	kg/cm ²		JIS	K7311	120±25	130±25	160±30	195±40	230±45
Modulus 300%	kg/cm ²		JIS	K7311	210±50	220±450	230±45	240±45	260±50
Tensile Strength kg/cm ²			JIS	K7311	350±70	350±70	400±80	350±70	350±70
Elongation %			JIS	K7311	450±90	450±90	450±90	400±80	400±80
Vicast Softening point ℃			JIS	K7311	130	135	135	135	140
Processing	Injection				yes	yes	yes	yes	yes
	Extrusion								
Transparency	mm	5~6 m/m			yes	yes	yes	yes	yes
		8~10 m/m							
UV Resistance	300W/12hr	4 ⁰	ASTM	D1148					
	300W/24hr	4 ⁰	ASTM	D1184					
Characteristics					.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency
Applications					.straps & buckles .rollers & parts .shoe materials .shoe hobnails .others	.straps & buckles for snowboots .antenna for TV and radio .shoe materials .others	.straps & buckles for snowboots & shoes .antenna for TV and radio .shoe materials .others	.straps & buckles for snowboots & shoes .shoe materials .ice skating boots .others	.shoe materials .ice skating boots .others

				Items		
				HT-1080AU	HT-1085AU	HT-1090AU
Physical Properties		Test Method				
Types	Ester			yes	yes	yes
	Ether					
Specific Gravity		JIS	K7311	1.18	1.19	1.19
Hardness	Shore A			80±2	85±2	90±2
	Shore D					
Modulus 100% kg/cm ²		JIS	K7311	45±90	60±10	80±15
Modulus 300% kg/cm ²		JIS	K7311	80±15	110±20	150±30
Tensile Strength kg/cm ²		JIS	K7311	350±70	450±90	550±110
Elongation %		JIS	K7311	550±110	550±110	550±110
Vicast Softening point °C		JIS	K7311	125	125	130
Processing	Injection			yes	yes	yes
	Extrusion					
Transparency	mm	5~6 m/m		yes	yes	yes
		8~10 m/m				
UV Resistance	300W/12hr	4 ⁰	ASTM D1148			
	300W/24hr	4 ⁰	ASTM D1184	yes	yes	yes
Characteristics				.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency .good UV resistance	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency .good UV resistance	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency .good UV resistance
Applications				.O Rings .pads .corks .auto parts .shoe soles .shoe materials .others	.O Rings .pads .corks .rollers & parts .wrist bands for watch .auto parts .shoe materials .others	.O Rings .pads .corks .rollers & parts .wrist bands for watch .auto parts .shoe materials .others

				Items				
				HT-1095AU	HT-2055AU	HT-2060AU	HT-2065AU	HT-2070AU
Physical Properties		Test Method						
Types	Ester			yes	yes	yes	yes	yes
	Ether							
Specific Gravity		JIS	K7311	1.2	1.21	1.22	1.23	1.24
Hardness	Shore A			95±2	98±2			
	Shore D				56±2	61±2	64±2	71±2
Modulus 100% kg/cm ²		JIS	K7311	120±25	130±25	160±30	195±40	230±45
Modulus 300% kg/cm ²		JIS	K7311	210±50	220±45	230±45	240±45	260±50
Tensile Strength kg/cm ²		JIS	K7311	350±70	350±70	400±80	350±70	350±70
Elongation %		JIS	K7311	450±90	450±90	450±90	400±80	400±80
Vicast Softening point °C		JIS	K7311	130	135	135	135	140
Processing	Injection			yes	yes	yes	yes	yes
	Extrusion							
Transparency	mm	5~6 m/m		yes	yes	yes	yes	yes
		8~10 m/m						
UV Resistance	300W/12hr	4 ⁰	ASTM D1148					
	300W/24hr	4 ⁰	ASTM D1184	yes	yes	yes	yes	yes
Characteristics				.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency .good UV resistance	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency .good UV resistance	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency .good UV resistance	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency .good UV resistance	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency .good UV resistance
Applications				.straps & buckles .rollers & parts .shoe materials .shoe hobnails .others	.straps & buckles for snowboots .antenna for TV and radio .shoe materials .others	.straps & buckles for snowboots & shoes .antenna for TV and radio .shoe materials .others	.straps & buckles for snowboots & shoes .shoe materials .ice skating boots .others	.shoe materials .ice skating boots .others

				Items		
				HT-1080HA	HT-1085HA	HT-1090HA
Physical Properties		Test Method				
Types	Ester			yes	yes	yes
	Ether					
Specific Gravity		JIS	K7311	1.18	1.19	1.19
Hardness	Shore A			80±2	85±2	90±2
	Shore D					
Modulus 100% kg/cm ²		JIS	K7311	45±90	60±10	80±15
Modulus 300% kg/cm ²		JIS	K7311	80±15	110±20	150±30
Tensile Strength kg/cm ²		JIS	K7311	350±70	450±90	550±110
Elongation %		JIS	K7311	550±110	550±110	550±110
Vicat Softening point ℃		JIS	K7311	125	125	130
Processing	Injection			yes	yes	yes
	Extrusion					
Transparency	mm	5~6 m/m				
		8~10 m/m		yes	yes	yes
UV Resistance	300W/12hr	4 ⁰	ASTM	D1148		
	300W/24hr	4 ⁰	ASTM	D1184		
Characteristics				.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency
Applications				.O Rings .pads .corks .auto parts .shoe soles .shoe materials .others	.O Rings .pads .corks .rollers & parts .wrist bands for watch .auto parts .shoe materials .others	.O Rings .pads .corks .rollers & parts .wrist bands for watch .auto parts .shoe materials .others

					Items				
					HT-1095HA	HT-2055HA	HT-2060HA	HT-2065HA	HT-2070HA
Physical Properties			Test Method						
Types	Ester				yes	yes	yes	yes	yes
	Ether								
Specific Gravity			JIS	K7311	1.2	1.21	1.22	1.23	1.24
Hardness	Shore A				95±2	98±2			
	Shore D					56±2	61±2	64±2	71±2
Modulus 100%	kg/cm ²		JIS	K7311	120±25	130±25	160±30	195±40	230±45
Modulus 300%	kg/cm ²		JIS	K7311	210±50	220±45	230±45	240±45	260±50
Tensile Strength kg/cm ²			JIS	K7311	350±70	350±70	400±80	350±70	350±70
Elongation	%		JIS	K7311	450±90	450±90	450±90	400±80	400±80
Vicast Softening point ℃			JIS	K7311	130	135	135	135	140
Processing	Injection				yes	yes	yes	yes	yes
	Extrusion								
Transparency	mm	5~6 m/m			yes	yes	yes	yes	yes
		8~10 m/m							
UV Resistance	300W/12hr	4 ⁰	ASTM	D1148					
	300W/24hr	4 ⁰	ASTM	D1184					
Characteristics					.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency
Applications					.straps & buckles .rollers & parts .shoe materials .shoe hobnails .others	.straps & buckles for snowboots .antenna for TV and radio .shoe materials .others	.straps & buckles for snowboots & shoes .antenna for TV and radio .shoe materials .others	.straps & buckles for snowboots & shoes .shoe materials .ice skating boots .others	.shoe materials .ice skating boots .others

				Items	
				HT-1080HAU	HT-1085HAU
Physical Properties			Test Method		
Types	Ester			yes	yes
	Ether				
Specific Gravity			JIS K7311	1.18	1.19
Hardness	Shore A			80±2	85±2
	Shore D				
Modulus 100% kg/cm²			JIS K7311	45±9	60±10
Modulus 300% kg/cm²			JIS K7311	80±15	110±20
Tensile Strength kg/cm²			JIS K7311	350±70	450±90
Elongation %			JIS K7311	550±110	550±110
Vicast Softening point °C			JIS K7311	125	125
Processing	Injection			yes	yes
	Extrusion				
Transparency	mm	5~6 m/m			
		8~10 m/m		yes	yes
UV Resistance	300W/12hr	4°	ASTM D1148		
	300W/24hr	4°	ASTM D1184	yes	yes
Characteristics				.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency .good UV resistance	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency .good UV resistance
Applications				.O Rings .pads .corks .auto parts .shoe soles .shoe materials .others	.O Rings .pads .corks .rollers & parts .wrist bands for watch .auto parts .shoe materials .others

					Items				
					HT-1095HAU	HT-2055HAU	HT-2060HAU	HT-2065HAU	HT-2070HAU
Physical Properties			Test Method						
Types	Ester				yes	yes	yes	yes	yes
	Ether								
Specific Gravity			JIS	K7311	1.2	1.21	1.22	1.23	1.24
Hardness	Shore A				95±2	98±2			
	Shore D					56±2	61±2	64±2	71±2
Modulus 100%	kg/cm ²		JIS	K7311	120±25	130±25	160±30	195±40	230±45
Modulus 300%	kg/cm ²		JIS	K7311	210±50	220±450	230±45	240±45	260±50
Tensile Strength kg/cm ²			JIS	K7311	350±70	350±70	400±80	350±70	350±70
Elongation	%		JIS	K7311	450±90	450±90	450±90	400±80	400±80
Vicast Softening point ℃			JIS	K7311	130	135	135	135	140
Processing	Injection				yes	yes	yes	yes	yes
	Extrusion								
Transparency	mm	5~6 m/m							
		8~10 m/m			yes	yes	yes	yes	yes
UV Resistance	300W/12hr	4 ⁰	ASTM	D1148					
	300W/24hr	4 ⁰	ASTM	D1184	yes	yes	yes	yes	yes
Characteristics					.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency .good UV resistance	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency .good UV resistance	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency .good UV resistance	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency .good UV resistance	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good transparency .good UV resistance
Applications					.straps & buckles .rollers & parts .shoe materials .shoe hobnails .others	.straps & buckles for snowboots .antenna for TV and radio .shoe materials .others	.straps & buckles for snowboots & shoes .antenna for TV and radio .shoe materials .others	.straps & buckles for snowboots & shoes .shoe materials .ice skating boots .others	.shoe materials .ice skating boots .others

				Items		
				HE-1180A	HE-1185A	HE-1190A
Physical Properties		Test Method				
Types	Ester			yes	yes	yes
	Ether					
Specific Gravity		JIS	K7311	1.18	1.19	1.19
Hardness	Shore A			80±2	85±2	90±2
	Shore D					
Modulus 100% kg/cm ²		JIS	K7311	45±10	60±10	80±15
Modulus 300% kg/cm ²		JIS	K7311	80±15	110±20	150±30
Tensile Strength kg/cm ²		JIS	K7311	350±70	450±90	550±110
Elongation %		JIS	K7311	550±110	550±110	550±110
Vicast Softening point °C		JIS	K7311	125	125	130
Processing	Injection					
	Extrusion			yes	yes	yes
Transparency	mm	5~6 m/m				
		8~10 m/m				
UV Resistance	300W/12hr	4°	ASTM	D1148		
	300W/24hr	4°	ASTM	D1184		
Characteristics				.very good tough elasticity .good abrasion resistance .good low temp. flexibility	.very good tough elasticity .good abrasion resistance .good low temp. flexibility	.very good tough elasticity .good abrasion resistance .good low temp. flexibility
Applications				.O Rings .pads .corks .fishing shoes .shoe materials .wires & cables .others	.wires & cables . pads .films. .rollers & parts .auto parts .air tubes .others	.wires & cables . pads .films. .rollers & parts .auto parts .air tubes .others

					<i>Items</i>	
					<i>HE-1195A</i>	<i>HE-2255A</i>
<i>Physical Properties</i>		<i>Test Method</i>				
<i>Types</i>	<i>Ester</i>				yes	yes
	<i>Ether</i>					
<i>Specific Gravity</i>		<i>JIS</i>	<i>K7311</i>		1.2	1.21
<i>Hardness</i>	<i>Shore A</i>				95±2	98±2
	<i>Shore D</i>					56±2
<i>Modulus 100% kg/cm²</i>		<i>JIS</i>	<i>K7311</i>		120±25	135±25
<i>Modulus 300% kg/cm²</i>		<i>JIS</i>	<i>K7311</i>		220±45	250±50
<i>Tensile Strength kg/cm²</i>		<i>JIS</i>	<i>K7311</i>		350±70	350±70
<i>Elongation %</i>		<i>JIS</i>	<i>K7311</i>		450±90	450±90
<i>Vicast Softening point °C</i>		<i>JIS</i>	<i>K7311</i>		130	130
<i>Processing</i>	<i>Injection</i>					
	<i>Extrusion</i>				yes	yes
<i>Transparency</i>	<i>mm</i>	<i>5~6 m/m</i>				
		<i>8~10 m/m</i>				
<i>UV Resistance</i>	<i>300W/12hr</i>	<i>4⁰</i>	<i>ASTM</i>	<i>D1148</i>		
	<i>300W/24hr</i>	<i>4⁰</i>	<i>ASTM</i>	<i>D1184</i>		
<i>Characteristics</i>					.very good tough elasticity .good abrasion resistance .good low temp. flexibility	.very good tough elasticity .good abrasion resistance .good low temp. flexibility
<i>Applications</i>					.air tubes .wires and cables .films .shoe materials .others	.air tubes .wires and cables .films .shoe materials .others

					Items		
					HE-1180AU	HE-1185AU	HE-1190AU
Physical Properties			Test Method				
Types	Ester				yes	yes	yes
	Ether						
Specific Gravity			JIS	K7311	1.18	1.19	1.19
Hardness	Shore A				80±2	85±2	90±2
	Shore D						
Modulus 100%	kg/cm ²		JIS	K7311	45±10	60±10	80±15
Modulus 300%	kg/cm ²		JIS	K7311	80±15	110±20	150±30
Tensile Strength kg/cm ²			JIS	K7311	350±70	450±90	550±110
Elongation	%		JIS	K7311	550±110	550±110	550±110
Vicast Softening point ℃			JIS	K7311	125	125	130
Processing	Injection						
	Extrusion				yes	yes	yes
Transparency	mm	5~6 m/m					
		8~10 m/m					
UV Resistance	300W/12hr	4 ⁰	ASTM	D1148	yes	yes	yes
	300W/24hr	4 ⁰	ASTM	D1184			
Characteristics					.very good tough elasticity .good abrasion resistance .good low temp. flexibility	.very good tough elasticity .good abrasion resistance .good low temp. flexibility	.very good tough elasticity .good abrasion resistance .good low temp. flexibility
Applications					.O Rings .pads .corks .fishing shoes .shoe materials .wires & cables .others	.wires & cables . pads .films. .rollers & parts .auto parts .air tubes .others	.wires & cables . pads .films. .rollers & parts .auto parts .air tubes .others

					Items	
					HE-1195AU	HE-2255AU
Physical Properties			Test Method			
Types	Ester				yes	yes
	Ether					
Specific Gravity			JIS	K7311	1.2	1.21
Hardness	Shore A				95±2	98±2
	Shore D					56±2
Modulus 100%	kg/cm ²		JIS	K7311	120±25	135±25
Modulus 300%	kg/cm ²		JIS	K7311	220±45	250±50
Tensile Strength kg/cm ²			JIS	K7311	350±70	350±70
Elongation	%		JIS	K7311	450±90	450±90
Vicast Softening point ℃			JIS	K7311	130	130
Processing	Injection					
	Extrusion				yes	yes
Transparency	mm	5~6 m/m				
		8~10 m/m				
UV Resistance	300W/12hr	4 ⁰	ASTM	D1148	yes	yes
	300W/24hr	4 ⁰	ASTM	D1184		
Characteristics					.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good UV resistance	.very good tough elasticity .good abrasion resistance .good low temp. flexibility .good UV resistance
Applications					.air tubes .wires and cables .films .shoe materials .others	.air tubes .wires and cables .films .shoe materials .others