

Items <div>Test method</div> <div>Units</div> <div>Grade</div>				Standard Grade						
				High Viscosity		Medium Viscosity			High Flowability	
				2010 SH210	3010 SH310	4010 SH410	4060	5010 SH510	7010 SH710	
Density		1183('87)	g/cm ³	1.42	1.42	1.42	1.42	1.42	1.42	
Mechanical	Yield Stress or Tensile Stress at Break		527-1 & -2('93)	MPa	69	71	72	72	73	73
	Tensile Strain at Break		527-1 & -2('93)	%	70	65	50	40	35	25
	Tensile Modulus		527-1 & -2('93)	MPa	2900	3100	3200	3000	3400	3400
	Notched Charpy Impact Strength 23°C		179/1eA('93)	kJ/m ²	15	13	10	9	8	7
Thermal	Melt Flow Rate		1133('97)D	g/10min	1.7	2.8	10	17	22	34
	Deflection Temperature Under Load	1.8 MPa	75-1 & -2('93)flat	°C	95	96	100	96	100	100
		0.45 MPa	75-1 & -2('93)flat	°C	163	163	165	163	165	165
Flammability		UL 94	—	HB	HB	HB	HB	HB	HB	
Mold shrinkage	Flow	Asahi Kasei	%	1.8~2.2	1.8~2.2	1.8~2.2	1.8~2.2	1.8~2.2	1.8~2.2	
	Right-angle	Asahi Kasei	%							
Features				Superhigh-impact grade;highest molecular weight category.	High-impact high-elongation grade; 2nd-highest molecular weight category.	General-purpose grade, high impact, high elongation, medium viscosity.	Reduce creak noise	General-purpose grade, Characterized by balanced flowability and mechanical properties.	High-flow grade, Suited for thin-Wall, long-flow-distance moldings.	

Items <div>Test method</div> <div>Units</div> <div>Grade</div>				High-Cycle				
				Medium Viscosity	High Flowability		Super Flowability	
					5050	7050	7054	9054
Density		1183('87)	g/cm ³	1.42	1.42	1.42	1.42	
Mechanical	Yield Stress or Tensile Stress at Break	527-1 & -2('93)	MPa	73	73	74	74	
	Tensile Strain at Break	527-1 & -2('93)	%	35	25	25	15	
	Tensile Modulus	527-1 & -2('93)	MPa	3400	3400	3400	3500	
	Notched Charpy Impact Strength 23°C	179/1eA('93)	kJ/m ²	7	6	6	4	
Thermal	Melt Flow Rate	1133('97)D	g/10min	21	34	39	70	
	Deflection Temperature Under Load	1.8 MPa	75-1 & -2('93)/flat	°C	100	100	100	100
		0.45 MPa	75-1 & -2('93)/flat	°C	165	165	165	165
Flammability		UL 94	—	HB	HB	HB	HB	
Mold shrinkage	Flow	Asahi Kasei	%	1.7~2.1	1.7~2.1	1.7~2.1	1.7~2.1	
	Right-angle	Asahi Kasei	%					
Features				Standard-flow grade with high crystallization rate, for higher productivity.	High-flow grade with high crystallization rate, for higher productivity.			

- Please note that all data and values are given as typical results obtained with the indicated test methods for purposes of basic reference in grade selection only, and not as any products specification or warranty of any nature, and are subject to change without notice.
- Be sure to read the relevant MSDS before handling and use, and always follow the Important Precautions.
- Contact Asahi Kasei before using Tenac or Tenac-C for any applications involving food contact.

TENAC® PROPERTIES (ISO)

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Items / Test method / Units / Grade				Weather-Resistant			Glass-Reinforced			
				High Viscosity	Medium Viscosity		Medium Viscosity		High Flowability	
				3013A	4013A	5013A	GA510	GA520	GN705	
Density		1183('87)	g/cm ³	1.42	1.42	1.42	1.50	1.56	1.59	
Mechanical	Yield Stress or Tensile Stress at Break		527-1 & -2('93)	MPa	70	71	72	64	54	110
	Tensile Strain at Break		527-1 & -2('93)	%	65	50	35	20	15	3
	Tensile Modulus		527-1 & -2('93)	MPa	3000	3100	3300	3900	4500	9000
	Notched Charpy Impact Strength 23°C		179/1eA('93)	kJ/m ²	13	10	8	5	4	7
Thermal	Melt Flow Rate		1133('97)D	g/10min	2.8	10	22	17	15	10
	Deflection Temperature Under Load	1.8 MPa	75-1 & -2('93)flat	°C	92	97	97	105	113	171
		0.45 MPa	75-1 & -2('93)flat	°C	163	164	164	165	165	175
Flammability		UL 94	—	—	—	—	HB	HB	HB	
Mold shrinkage	Flow	Asahi Kasei	%	1.8~2.2	1.8~2.2	1.8~2.2	1.5~1.8	1.5~1.8	0.4~0.6	
	Right-angle	Asahi Kasei	%				1.0~1.3	1.0~1.3	1.0~1.2	
Features				Weather-Resistant grade containing UV absorber and other additives for superior weatherability.			10% GF-filled grade with high stiffness and superior dimensional stability.	20% GF-filled grade with high stiffness and superior dimensional stability.	25% GF-filled, with high stiffness and high strength.	

Items / Test method / Units / Grade				High-Lubricity							Impact-Resistant, Soft
				High Viscosity	Medium Viscosity					High Viscosity	Medium Viscosity
				LT802	LT804	LT200	FS410	LA541 LA543	LM511	LS701	4012
Density		1183('87)	g/cm ³	1.42	1.42	1.40	1.46	1.38	1.42	1.42	1.42
Mechanical	Yield Stress or Tensile Stress at Break	527-1 & -2('93)	MPa	67	67	61	64	60	66	65	66
	Tensile Strain at Break	527-1 & -2('93)	%	65	40	50	30	40	45	30	35
	Tensile Modulus	527-1 & -2('93)	MPa	3000	3100	3000	3100	2800	3000	3200	2900
	Notched Charpy Impact Strength 23°C	179/1eA('93)	kJ/m ²	13	10	8	5	7	7	6	10
Thermal	Melt Flow Rate	1133('97)D	g/10min	2.5	12	25	9	17	22	34	10
	Deflection Temperature Under Load	1.8 MPa	75-1 & -2('93)flat	°C	85	85	92	100	95	100	80
		0.45 MPa	75-1 & -2('93)flat	°C	154	155	161	164	165	165	151
Flammability		UL 94	—	HB	HB	HB	HB	HB	HB	HB	HB
Mold shrinkage	Flow	Asahi Kasei	%	1.8~2.2	1.8~2.2	1.8~2.2	1.8~2.2	1.8~2.2	1.8~2.2	1.8~2.2	1.8~2.2
	Right-angle	Asahi Kasei	%								
Features				High impact, high elongation, and excellent friction and wear on metals.	Excellent friction and wear on metals.	Superhigh lubricity grade containing special lubricant.	Contains fluoropolymer; excellent friction and wear on plastics.	Excellent friction and wear on metals and plastics, except POM.	Excellent friction and wear on metals and plastics.	Excellent friction and wear on metals and plastics, low μ.	Medium-viscosity grade, with reduced stiffness and increased elongation through addition of special polymers.

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