Product Comparison



Technical	l Data

Product Description				
LG MABS XG568	Description • Anti-Scratch, High Gloss			
	pplication TV Front Cabinet, Bezel Audio	/Video Housing		
	his data represents typical values t IABS	that have been calculated from all pr	roducts classified	as: Generic
	his information is provided for com	parative purposes only.		
General	LG MABS XG568	Generic MABS		
Manufacturer / Supplier	LG Chem Ltd.	Generic		
Generic Symbol	• MABS	• MABS		
Material Status	Commercial: Active	Commerce	cial: Active	
Literature ¹	Technical Datasheet (Eng	glish)		
UL Yellow Card ²	E67171-482536E248280-100041122			
Search for UL Yellow Card	LG Chem Ltd.			
Availability	Asia PacificEuropeLatin AmericaNorth America	Africa & MAsia PaciEuropeLatin AmeNorth Am	ific erica	
Features	Good Scratch ResistanceHigh Gloss			
Uses	Electrical/Electronic AppliTelevision Housings	ications		
RoHS Compliance	 RoHS Compliant 			
Processing Method	Injection Molding			
Physical	LG MABS XG568	Generic MABS	Unit	Test Method
Density / Specific Gravity				
4	1.10			ASTM D792
		1.06 to 1.11		ASTM D792
		1.08 to 1.10	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR)				
220°C/10.0 kg	18	2.0 to 25	g/10 min	ASTM D1238
220°C/10.0 kg		10 to 30	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (220	0°C/10.0 kg)	2.0 to 18	cm³/10min	ISO 1133
Molding Shrinkage				
Flow		5.0E-3 to 5.6E-3	in/in	ASTM D955
Flow: 73°F, 0.126 in, Injection M	olded 4.0E-3 to 7.0E	i-3	in/in	ASTM D955
Across Flow		4.0E-3 to 6.0E-3	in/in	ASTM D955
		0.40 to 0.60	%	ISO 294-4

Form No. TDS-137341-118235-en

Document Created: Saturday, December 2, 2023



www.ulprospector.com

Mechanical	LG MABS XG568	Generic MABS	Unit	Test Method
Tensile Modulus				
		281000 to 384000	psi	ASTM D638
73°F, 0.126 in, Injection Molded ⁵	384000		psi	ASTM D638
		273000 to 381000	psi	ISO 527-1
Tensile Strength		2.00001000	ρσ.	
Yield		5350 to 8560	psi	ASTM D638
Yield, 73°F, 0.126 in, Injection Molded ⁵	7980		psi	ASTM D638
Yield		6030 to 8040	psi	ISO 527-2
Break		4330 to 5690	psi	ASTM D638
Break		4640 to 6960	psi	ISO 527-2
		6530 to 8270	psi	ISO 527-2
Tensile Strain		333 10 021 0	P01	
Yield		3.0 to 4.0	%	ISO 527-2
Break		15 to 26	%	ASTM D638
Break, 73°F, 0.126 in, Injection Molded ⁵	> 15		%	ASTM D638
Break		5.0 to 21	%	ISO 527-2
Flexural Modulus		0.0 to 21	70	100 027 2
		257000 to 413000	psi	ASTM D790
73°F, 0.126 in, Injection Molded ⁶	413000		psi	ASTM D790
		318000 to 384000	psi	ISO 178
Flexural Strength		310000 to 304000	ры	100 170
		7790 to 13900	psi	ASTM D790
73°F, 0.126 in, Injection Molded ⁶	13100	7790 to 13900		ASTM D790
•	13100	 10100 to 12500	psi	ISO 178
	LG MABS	Generic	psi	150 176
Impact	XG568	MABS	Unit	Test Method
Charpy Notched Impact Strength		0.95 to 7.2	ft·lb/in²	ISO 179
Charpy Unnotched Impact Strength		33 to 58	ft·lb/in²	ISO 179
Notched Izod Impact				
		0.37 to 3.1	ft·lb/in	ASTM D256
-22°F, 0.126 in, Injection Molded	0.37		ft·lb/in	ASTM D256
-22°F, 0.252 in, Injection Molded	0.56		ft·lb/in	ASTM D256
73°F, 0.126 in, Injection Molded	1.5		ft·lb/in	ASTM D256
73°F, 0.252 in, Injection Molded	2.1		ft·lb/in	ASTM D256
		3.3 to 7.2	ft·lb/in²	ISO 180
Hardness	LG MABS XG568	Generic MABS	Unit	Test Method
Rockwell Hardness				
		105 to 118		ASTM D785
R-Scale, 73°F, Injection Molded	115			ASTM D785
		102 to 116		ISO 2039-2

2 of 4



www.ulprospector.com

Definition Temperature Under Load 66 psi, Unannealed 178 to 198 °F ISO 75-218 66 psi, Unannealed 172 to 198 °F ISO 75-218 66 psi, Annealed 172 to 198 °F ASTM D648 264 psi, Unannealed, 0.252 in, Injection 180 172 to 198 °F ASTM D648 264 psi, Unannealed, 0.252 in, Injection 180 158 to 174 °F ISO 75-21A 264 psi, Annealed 158 to 174 °F ISO 75-21A 264 psi, Annealed 158 to 174 °F ISO 75-21A 264 psi, Annealed 180 to 226 °F ASTM D648 264 psi, Annealed 180 to 226 °F ASTM D152 ASTM D152 °F ISO 75-21A 75 to 204 °F ISO 75-21A 75 to 205 °F ISO 75-21A 75 t					
66 psi, Unannealed - 178 to 198 *F ISO 75-2/B 66 psi, Annealed - 185 to 201 *F ISO 75-2/B 66 psi, Annealed - 185 to 201 *F ASTM D648 264 psi, Unannealed 1,0 252 in, Injection Molded 27 180 - **F ASTM D648 264 psi, Unannealed 0,0 252 in, Injection Molded 37 **F ISO 75-2/A 264 psi, Unannealed - 158 to 174 **F ISO 75-2/A 264 psi, Annealed - **T 158 to 174 **F ISO 75-2/A 264 psi, Annealed - **F ISO 75-2/A **C **F ISO 75-2/A **C **C **C **C **C *	Thermal			Unit	Test Method
Figure F	Deflection Temperature Under Load				
204 psi, Unannealed	66 psi, Unannealed		178 to 198	°F	ISO 75-2/B
264 psi, Unannealed, 0.252 in, Injection 1800	66 psi, Annealed		185 to 201	°F	ISO 75-2/B
Molded 7 100 - F Roll Mobbs 264 psi, Unannealed - 158 to 174 *F ISO 75-2/A 264 psi, Annealed - 175 to 204 *F ISO 75-2/A Vicat Softening Temperature - 180 to 226 *F ASTM D152 - 194 - *F ASTM D152 - - 187 to 221 *F ASTM D152 - - 187 to 221 *F ASTM D152 - - - *F U.746B RTI Istr 122 - *F U.746B RTI Str 122 - *F U.746B Electrical LG MABS XG568 Generic MABS Unit Test Method Dissipation Factor - 0.013 to 0.016 IEC 60250 Flammability LG MABS XG568 Generic MABS Unit Test Method Flame Rating - 0.013 to 0.016 IEC 60250 Optical LG MABS XG568 Generic <td>264 psi, Unannealed</td> <td></td> <td>172 to 198</td> <td>°F</td> <td>ASTM D648</td>	264 psi, Unannealed		172 to 198	°F	ASTM D648
264 psi, Annealed - 175 to 204 "F ISO 75-2/A Vicat Softening Temperature - 180 to 226 "F ASTM D152 194 - "F ISO 306 187 to 221 "F ISO 306 RTI Elec 122 - "F UL 746B RTI Imp 122 - "F UL 746B RTI Str 122 - "F UL 746B RTI Str 122 - "F UL 746B Electrical LG MABS XG568 Ceneric MABS Unit Test Method Dissipation Factor - 0.013 to 0.016 Test Method Flammability LG MABS XG568 Ceneric MABS Unit Test Method Obtical LG MABS XG568 Ceneric MABS Unit Test Method Distinct LG MABS XG568 Ceneric MABS Unit Test Method Light Transmittance - 85.8 to 90.0 % ASTM D100 Injection LG MABS XG568 Ceneric MABS Unit MABS <	264 psi, Unannealed, 0.252 in, Injection Molded ⁷	180		°F	ASTM D648
Vicat Softening Temperature	264 psi, Unannealed		158 to 174	°F	ISO 75-2/A
180 to 226 °F ASTM D152 194 °F ASTM D152 194 °F ASTM D152 187 to 221 °F ISO 306 RTI Elec 122 °F UL 7468 RTI Imp 122 °F UL 7468 RTI Str 122 °F UL 7468 RABS Ceneric MABS Unit Test Method RABS Unit Test Method RABS Ceneric MABS Unit Test Method RABS Unit Test Method RABS Ceneric MABS Unit Test Method RABS Unit Test Method RABS Ceneric MABS Unit Test Method RABS Unit Test Method RABS Ceneric MABS Unit Test Method RABS Unit Test Method RABS Ceneric MABS Unit Test Method RABS Unit Test Method RABS Ceneric MABS Unit Test Method RABS Unit Test Method RABS Unit Test Method RABS Unit Test Method RABS Ceneric MABS Unit Test Method RABS Unit Test Method RABS Ceneric MABS Unit Test Method RABS Unit Test Method RABS Ceneric MABS Unit Test Method RABS Unit Test Method RABS Ceneric MABS Unit Test Method RABS Unit Test Method RABS Ceneric MABS Unit Test Method RABS Unit Test Method RABS Ceneric MABS Unit Test Method RABS Ceneric MABS Unit Test Method RABS Unit Test Method RABS Ceneric MABS Unit Test Method RABS	264 psi, Annealed		175 to 204	°F	ISO 75-2/A
194 187 to 221	Vicat Softening Temperature				
-			180 to 226	°F	ASTM D1525
RTI Elec 122 - °F UL 746B RTI Imp 122 - °F UL 746B RTI Str 122 - °F UL 746B RTI Str 122 - °F UL 746B Clectrical LG MABS Generic Unit Test Method Dissipation Factor - 0.013 to 0.016 IEC 60250 Flammability LG MABS Generic Unit Test Method AC568 MABS MABS Unit Test Method O.05 in HB - Unit Test Method Distinct LG MABS Generic Unit Test Method Light Transmittance - 85.8 to 90.0 % ASTM D100 Haze - 1.75 to 3.25 % ASTM D100 Polying Temperature 176 to 194 158 to 185 °F Drying Time 3.0 to 4.0 2.0 to 4.0 hr Rear Temperature 356 to 392 365 to 428 °F <tr< td=""><td></td><td>194</td><td></td><td>°F</td><td>ASTM D1525 8</td></tr<>		194		°F	ASTM D1525 8
RTI Imp			187 to 221	°F	ISO 306
RTI Imp	RTI Elec	122		°F	UL 746B
RTI Str		122		°F	UL 746B
Dissipation Factor		122		°F	UL 746B
Comparison	Electrical			Unit	Test Method
Flame Rating 0.06 in	Dissipation Factor		0.013 to 0.016		IEC 60250
0.06 in 0.13 in HB Optical LG MABS XG568 Generic MABS Unit Test Method Test Method MABS Light Transmittance 85.8 to 90.0 % ASTM D100 Haze 1.75 to 3.25 % ASTM D100 Prijection LG MABS XG568 Generic MABS Unit Drying Temperature 176 to 194 158 to 185 °F Drying Time 3.0 to 4.0 2.0 to 4.0 hr Rear Temperature 356 to 392 365 to 428 °F Middle Temperature 374 to 410 392 to 420 °F Front Temperature 392 to 428 410 to 456 °F Nozzle Temperature 392 to 446 417 to 464 °F Processing (Melt) Temp 392 to 446 417 to 473 °F Mold Temperature 104 to 140 121 to 145 °F Injection Pressure 17500 to 22500 psi Back Pressure 17500 to 22500 psi	Flammability			Unit	Test Method
Optical HB Optical LG MABS XG568 Generic MABS Unit Test Method Light Transmittance 85.8 to 90.0 % ASTM D100 Haze 1.75 to 3.25 % ASTM D100 Injection LG MABS XG568 Generic MABS Unit Drying Temperature 176 to 194 158 to 185 °F Drying Time 3.0 to 4.0 2.0 to 4.0 hr Rear Temperature 356 to 392 365 to 428 °F Middle Temperature 374 to 410 392 to 420 °F Front Temperature 392 to 428 410 to 456 °F Nozzle Temperature 392 to 446 417 to 464 °F Processing (Melt) Temp 392 to 446 417 to 473 °F Mold Temperature 104 to 140 121 to 145 °F Injection Pressure 17500 to 22500 psi Back Pressure 142 to 427 psi	Flame Rating				UL 94
Optical LG MABS XG568 Generic MABS Unit Test Method Light Transmittance 85.8 to 90.0 % ASTM D100 Haze 1.75 to 3.25 % ASTM D100 Injection LG MABS XG568 Generic MABS Unit Drying Temperature 176 to 194 158 to 185 °F Drying Time 3.0 to 4.0 2.0 to 4.0 hr Rear Temperature 356 to 392 365 to 428 °F Middle Temperature 374 to 410 392 to 420 °F Front Temperature 392 to 428 410 to 456 °F Nozzle Temperature 392 to 446 417 to 464 °F Processing (Melt) Temp 392 to 446 417 to 473 °F Mold Temperature 104 to 140 121 to 145 °F Injection Pressure 17500 to 22500 psi Back Pressure 142 to 427 psi	0.06 in	НВ			
Optical XG568 MABS Unit Test Method Light Transmittance 85.8 to 90.0 % ASTM D100 Haze 1.75 to 3.25 % ASTM D100 njection LG MABS XG568 Generic MABS Unit Drying Temperature 176 to 194 158 to 185 °F Drying Time 3.0 to 4.0 2.0 to 4.0 hr Rear Temperature 356 to 392 365 to 428 °F Middle Temperature 374 to 410 392 to 420 °F Front Temperature 392 to 428 410 to 456 °F Nozzle Temperature 392 to 446 417 to 464 °F Processing (Melt) Temp 392 to 446 417 to 473 °F Mold Temperature 104 to 140 121 to 145 °F Injection Pressure 17500 to 22500 psi Back Pressure 142 to 427 psi	0.13 in	НВ			
Haze 1.75 to 3.25 % ASTM D100 LG MABS XG568 MABS Unit Drying Temperature 176 to 194 158 to 185 °F Drying Time 3.0 to 4.0 2.0 to 4.0 hr Rear Temperature 356 to 392 365 to 428 °F Middle Temperature 374 to 410 392 to 420 °F Front Temperature 392 to 428 410 to 456 °F Nozzle Temperature 392 to 446 417 to 464 °F Processing (Melt) Temp 392 to 446 417 to 473 °F Mold Temperature 104 to 140 121 to 145 °F Injection Pressure 17500 to 22500 psi Back Pressure 9 142 to 427 psi	Optical			Unit	Test Method
njection LG MABS XG568 Generic MABS Unit Drying Temperature 176 to 194 158 to 185 °F Drying Time 3.0 to 4.0 2.0 to 4.0 hr Rear Temperature 356 to 392 365 to 428 °F Middle Temperature 374 to 410 392 to 420 °F Front Temperature 392 to 428 410 to 456 °F Nozzle Temperature 392 to 446 417 to 464 °F Processing (Melt) Temp 392 to 446 417 to 473 °F Mold Temperature 104 to 140 121 to 145 °F Injection Pressure 17500 to 22500 psi Back Pressure 142 to 427 psi	Light Transmittance		85.8 to 90.0	%	ASTM D1003
Drying Temperature 176 to 194 158 to 185 °F Drying Time 3.0 to 4.0 2.0 to 4.0 hr Rear Temperature 356 to 392 365 to 428 °F Middle Temperature 374 to 410 392 to 420 °F Front Temperature 392 to 428 410 to 456 °F Nozzle Temperature 392 to 446 417 to 464 °F Processing (Melt) Temp 392 to 446 417 to 473 °F Mold Temperature 104 to 140 121 to 145 °F Injection Pressure 17500 to 22500 psi Back Pressure 142 to 427 psi	Haze		1.75 to 3.25	%	ASTM D1003
Drying Time 3.0 to 4.0 2.0 to 4.0 hr Rear Temperature 356 to 392 365 to 428 °F Middle Temperature 374 to 410 392 to 420 °F Front Temperature 392 to 428 410 to 456 °F Nozzle Temperature 392 to 446 417 to 464 °F Processing (Melt) Temp 392 to 446 417 to 473 °F Mold Temperature 104 to 140 121 to 145 °F Injection Pressure 17500 to 22500 psi Back Pressure psi	njection			Unit	
Rear Temperature 356 to 392 365 to 428 °F Middle Temperature 374 to 410 392 to 420 °F Front Temperature 392 to 428 410 to 456 °F Nozzle Temperature 392 to 446 417 to 464 °F Processing (Melt) Temp 392 to 446 417 to 473 °F Mold Temperature 104 to 140 121 to 145 °F Injection Pressure 17500 to 22500 psi Back Pressure 9 142 to 427 psi	Drying Temperature	176 to 194	158 to 185	°F	
Middle Temperature 374 to 410 392 to 420 °F Front Temperature 392 to 428 410 to 456 °F Nozzle Temperature 392 to 446 417 to 464 °F Processing (Melt) Temp 392 to 446 417 to 473 °F Mold Temperature 104 to 140 121 to 145 °F Injection Pressure 17500 to 22500 psi Back Pressure 9 142 to 427 psi	Drying Time	3.0 to 4.0	2.0 to 4.0	hr	
Middle Temperature 374 to 410 392 to 420 °F Front Temperature 392 to 428 410 to 456 °F Nozzle Temperature 392 to 446 417 to 464 °F Processing (Melt) Temp 392 to 446 417 to 473 °F Mold Temperature 104 to 140 121 to 145 °F Injection Pressure 17500 to 22500 psi Back Pressure 9 142 to 427 psi	Rear Temperature	356 to 392	365 to 428	°F	
Front Temperature 392 to 428 410 to 456 °F Nozzle Temperature 392 to 446 417 to 464 °F Processing (Melt) Temp 392 to 446 417 to 473 °F Mold Temperature 104 to 140 121 to 145 °F Injection Pressure 17500 to 22500 psi Back Pressure psi		374 to 410	392 to 420	°F	
Nozzle Temperature 392 to 446 417 to 464 °F Processing (Melt) Temp 392 to 446 417 to 473 °F Mold Temperature 104 to 140 121 to 145 °F Injection Pressure 17500 to 22500 psi Back Pressure psi	Front Temperature	392 to 428	410 to 456	°F	
Processing (Melt) Temp 392 to 446 417 to 473 °F Mold Temperature 104 to 140 121 to 145 °F Injection Pressure 17500 to 22500 psi Back Pressure psi 9 142 to 427 psi	Nozzle Temperature	392 to 446	417 to 464	°F	
Mold Temperature 104 to 140 121 to 145 °F Injection Pressure 17500 to 22500 psi Back Pressure psi				°F	
Injection Pressure 17500 to 22500 psi Back Pressure psi 9 142 to 427 psi				°F	
Back Pressure 9 142 to 427 psi				psi	
⁹ 142 to 427 psi	•			•	
		142 to 427		psi	
107 to 0000 to			107 to 6530	psi	
Screw Speed 30 to 60 45 to 100 rpm					

3 of 4

Product Comparison



jection Notes	
LG MABS XG568	Minimum Moisture Content: 0.01%
Generic MABS	This data represents typical values that have been calculated from all products classified as: Generic MABS
	This information is provided for comparative purposes only.

Notes

- ¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.
- ² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.
- ³ Typical properties: these are not to be construed as specifications.
- ⁴ 23°C
- ⁵ 2.0 in/min
- ⁶ 0.59 in/min
- ⁷ Edgewise
- ⁸ Rate A (50°C/h), Loading 2 (50 N)
- ⁹ Hydraulic Type