

## Valox\* Resin EH7020HF

Americas: LIMITED USE

Valox EH7020HF is a mineral filled PBT/PET that offers good surface appearance, high flow and good heat performance. EH7020HF was developed for automotive bezel application that require basecoat + top coat metalization. EH7020HF is higher flow version of EH7020.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 5 mm/min	56	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	55	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2	%	ASTM D 638
Tensile Modulus, 5 mm/min	5880	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	93	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	4680	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	45	MPa	ISO 527
Tensile Stress, break, 5 mm/min	57	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.5	%	ISO 527
Tensile Strain, break, 5 mm/min	1.9	%	ISO 527
Tensile Modulus, 1 mm/min	4800	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	96	MPa	ISO 178
Flexural Modulus, 2 mm/min	4710	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	27	J/m	ASTM D 256
Izod Impact, notched 80*10*4 +23°C	2	kJ/m <sup>2</sup>	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 1.82 MPa, 3.2mm, unannealed	70	°C	ASTM D 648
Vicat Softening Temp, Rate B/120	179	°C	ISO 306
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	77	°C	ISO 75/Ae
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.49	-	ASTM D 792
Melt Flow Rate, 265°C/2.16kg	64	g/10 min	ASTM D 1238
Melt Flow Rate, 266°C/1.2 kgf	36	g/10 min	ASTM D 1238
Density	1.49	g/cm <sup>3</sup>	ISO 1183
Melt Volume Rate, MVR at 265°C/2.16 kg	52	cm <sup>3</sup> /10 min	ISO 1133

Source GMD, last updated:04/28/2004

### Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	120	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	12	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	250 - 265	°C
Nozzle Temperature	245 - 260	°C

Front - Zone 3 Temperature	250 - 265	°C
Middle - Zone 2 Temperature	245 - 260	°C
Rear - Zone 1 Temperature	240 - 255	°C
Mold Temperature	65 - 90	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	50 - 80	rpm
Shot to Cylinder Size	40 - 80	%
Vent Depth	0.025 - 0.038	mm

Source GMD, last updated:04/28/2004

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

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