+135-3858-6433 (GuangDong)
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Ultraform® N2200 G43 AT

POM-GF20 BASF

Injection molding grade for parts requiring high stiffness and strength together with good mold release.

Abbreviated designation according to ISO 1043: POM-GF20
Designation according to ISO 29988-POM-K,GF20,M-GNR,2-3

流变性能	数值	单位	试验方法
ISO数据			
熔体体积流动速度, MVR	3.5	cm³/10min	ISO 1133
温度	190	°C	-
载荷	2.16	kg	-
模塑收缩率, 平行	0.7	%	ISO 294-4, 2577
模塑收缩率, 垂直	1.1	%	ISO 294-4, 2577

机械性能	数值	单位	试验方法
ISO数据			
拉伸模量	7800	MPa	ISO 527
断裂应力	120	MPa	ISO 527
断裂伸长率	2.7	%	ISO 527
无缺口简支梁冲击强度, +23°C	50	kJ/m²	ISO 179/1eU
无缺口简支梁冲击强度, -30°C	50	kJ/m²	ISO 179/1eU
简支梁缺口冲击强度, +23°C	7.5	kJ/m²	ISO 179/1eA
简支梁缺口冲击强度, -30°C	7.5	kJ/m²	ISO 179/1eA

热性能	数值	单位	试验方法
ISO数据			
熔融温度, 10°C/min	165	°C	ISO 11357-1/-3
热变形温度, 1.80 MPa	161	°C	ISO 75-1/-2
维卡软化温度, 50°C/h 50N	160	°C	ISO 306
线性热膨胀系数, 平行	50	E-6/K	ISO 11359-1/-2
1.5mm名义厚度时的燃烧性	HB	class	UL 94
测试用试样的厚度	1.6	mm	-
UL注册	是的	-	-
厚度为h时的燃烧性	HB	class	UL 94
测试用试样的厚度	0.8	mm	-

电性能	数值	单位	试验方法
ISO数据			
相对介电常数, 100Hz	4	-	IEC 62631-2-1
相对介电常数, 1MHz	4.1	-	IEC 62631-2-1
介质损耗因子, 100Hz	40	E-4	IEC 62631-2-1
介质损耗因子, 1MHz	70	E-4	IEC 62631-2-1
体积电阻率	1E10	Ohm*m	IEC 62631-3-1
表面电阻率	1E14	Ohm	IEC 62631-3-2
介电强度	43	kV/mm	IEC 60243-1
相对漏电起痕指数	600	-	IEC 60112

其它性能	数值	单位	试验方法
ISO数据			
吸水性	1	%	类似ISO 62
吸湿性	0.2	%	类似ISO 62
密度	1550	kg/m³	ISO 1183

流变计算用参数	数值	单位	试验方法
ISO数据			
熔体密度	1330	kg/m³	-
熔体	0.2	W/(m K)	-
喷射温度	125	°C	-

试样制备条件	数值	单位	试验方法
ISO数据			
注塑, 熔体温度	200	°C	ISO 294

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注塑, 模具温度	90	°C	ISO 294
注塑, 注射速度	200	mm/s	ISO 294

加工推荐（注塑）	数值	单位	试验方法
预干燥-温度	100	°C	-
预干燥-时间	3	h	-
加工湿度	≤ 0.2	%	-
注塑熔体温度	190 - 220	°C	-
模具温度	60 - 120	°C	-

特征

加工方法
注塑

添加剂
脱模助剂

供货形式
粒料

特征
共聚物

注塑

PREPROCESSING
Pre/Post-processing, max. allowed water content: .2 %
Pre/Post-processing, Pre-drying, Temperature: 100 °C
Pre/Post-processing, Pre-drying, Time: 3 h

PROCESSING
injection molding, Melt temperature, range: 190 - 220 °C
injection molding, Melt temperature, recommended: 210 °C
injection molding, Mold temperature, range: 60 - 120 °C
injection molding, Mold temperature, recommended: 100 °C
injection molding, Dwell time, thermoplastics: 10 min

Processing

Usual single-flighted three-section screws with an effective screw length of at least 15 D, better 20 - 23 D are suitable for the injection molding of Ultraform.

Pretreatment

Granules or pellets in original packaging can be processed without any special pretreatment. Granules or pellets which have become moist due to prolonged or incorrect storage (e.g. by formation of condensed water) must be dried in dehumidifying or recirculating air dryers for approx. 3 hours at about 100 - 110 °C. The moisture content should not exceed 0.2 %.

Postprocessing

If parts were produced at a comparatively low mold temperature (e.g. in order to obtain short cycle times) and must not change their geometry in use thermal postprocessing inducing dimensional changes by postcrystallization may be necessary. In such cases parts should be stored in an oven with recirculated air at temperatures of 100 - 130 °C until dimensions don't change significantly any further. The time needed for this has to be determined experimentally.