

Technical Data	
产品说明	
TRIEX® 3020HF	• TRIEX is the registered trademark of polycarbonate resin manufactured by Samyang Corporation. TRIEX polycarbonate resins offer superior mechanical properties, good dimensional stability and high electrical performance, which allows it to be widely used for electrical, electronic, appliance, automotive and optical industries. • TRIEX 3020HF is a polycarbonate resin grade which has high low temperature impact strength in combination with superior mechanical and physical property. CHARACTERISTICS • Superior low temperature impact resistance • Good flow-ability • Workable under a wide range of temperatures (-100 ? ~ 135 ?) • High electrical performance • Good dimensional stability • Low moisture absorbency • Good weather resistance APPLICATIONS • TRIEX 3020HF resin grade is designed for injection molding products. • High flow viscosity. Transparent colors only.
Lupoy® 1301-22	LUPOY PC 1301-22 resin is designed for extrusion and injection molding products. It exhibits an excellent physical property balance of heat resistance, transparency and impact strength. Main Characteristics: • Low viscosity • Good mold release Applications: • Appliances • Mobile phone keypads • Rigid packaging applications
Lupoy® 1300-22	LUPOY PC 1300-22 resin is designed for extrusion and injection molding products. It exhibits an excellent physical property balance of heat resistance, transparency and impact strength.
Lupoy® 1201-22	LUPOY PC 1201-22 resin is designed for extrusion and injection molding products. It exhibits an excellent physical property balance of heat resistance, transparency and impact strength.
Lupoy® 1200-22	LUPOY PC 1200-22 resin is designed for extrusion and injection molding products. It exhibits an excellent physical property balance of heat resistance, transparency and impact strength.



总体	TRIEX® 3020HF	Lupoy® 1301-22	Lupoy® 1300-22	Lupoy® 1201-22	Lupoy® 1200-22
生产商/供应商	• Samyang Corporation	• LG Chem Ltd.	• LG Chem Ltd.	• LG Chem Ltd.	• LG Chem Ltd.
通用符号	• PC	• PC	• PC	• PC	• PC
材料状态	• 已商用：当前有效	• 已商用：当前有效	• 已商用：当前有效	• 已商用：当前有效	• 已商用：当前有效
资料 ¹	• Technical Datasheet (English)	• Technical Datasheet (English)	• Technical Datasheet (English)	• Technical Datasheet (English)	• Technical Datasheet (English)
UL 黄卡 ²	• E121254-220598 • E257054-521406 • E366374-101723899	• E67171-100907359	• E67171-100907361 • E67171-100907359	• E67171-100907359	• E67171-100907359
搜索 UL 黄卡	• Samyang Corporation • TRIEX®	• LG Chem Ltd. • Lupoy®	• LG Chem Ltd. • Lupoy®	• LG Chem Ltd. • Lupoy®	• LG Chem Ltd. • Lupoy®
供货地区	• 北美洲 • 欧洲 • 亚太地区	• 北美洲 • 拉丁美洲 • 欧洲 • 亚太地区	• 北美洲 • 拉丁美洲 • 欧洲 • 亚太地区	• 北美洲 • 拉丁美洲 • 欧洲 • 亚太地区	• 北美洲 • 拉丁美洲 • 欧洲 • 亚太地区
特性	• 尺寸稳定性良好 • 低吸湿性 • 良好的电气性能 • 良好的流动性 • 耐低温冲击 • 耐气候影响性能良好 • 粘度，高	• 低粘度 • 脱模性能良好	• 低粘度 • 抗撞击性，良好 • 耐热性，高 • 清晰度，高	• 低粘度 • 抗撞击性，良好 • 耐热性，高 • 清晰度，高 • 食品接触的合规性 • 脱模性能良好	• 低粘度 • 抗撞击性，良好 • 耐热性，高 • 清晰度，高 • 食品接触的合规性
用途	• 电气/电子应用领域 • 光学应用 • 家电部件 • 汽车领域的应用	• 包装 • 电器用具 • 手机	• 包装 • 电器用具 • 混料	• 包装 • 玩具 • 一次性餐具	• 包装 • 玩具 • 一次性餐具
机构评级	--	• EC 1907/2006 (REACH)	• EC 1907/2006 (REACH)	• EC 1907/2006 (REACH) • FDA 21 CFR 177.1580 • 欧洲 食品接触, 未评级	• EC 1907/2006 (REACH) • FDA 21 CFR 177.1580 • 欧洲 食品接触, 未评级
RoHS 合规性	--	• RoHS 合规	• RoHS 合规	• RoHS 合规	• RoHS 合规
UL 文件号	--	• E67171	• E306922	• E306922	• E306922
外观	• 清晰/透明	--	--	--	--
形式	• 粒子	--	--	--	--
加工方法	• 注射成型	• 挤出 • 注射成型	• 挤出 • 注射成型	• 挤出 • 注射成型	• 挤出 • 注射成型



物理性能	TRIEX® 3020HF	Lupoy® 1301-22	Lupoy® 1300-22	Lupoy® 1201-22	Lupoy® 1200-22	单位制	测试方法
比重	1.20	1.20	1.20	1.20	1.20	g/cm³	ASTM D792
熔流率 (熔体流动速率) (300°C/1.2 kg)	23	22	22	22	22	g/10 min	ASTM D1238
收缩率 - 流动							ASTM D955
--	--	0.50 到 0.70	0.50 到 0.70	0.50 到 0.70	0.50 到 0.70	%	
3.00 mm	0.50 到 0.70	--	--	--	--	%	
吸水率							ASTM D570
23°C, 24 hr	0.15	0.15	0.15	0.15	0.15	%	
平衡, 23°C, 50% RH	--	0.32	0.32	0.32	0.32	%	
机械性能	TRIEX® 3020HF	Lupoy® 1301-22	Lupoy® 1300-22	Lupoy® 1201-22	Lupoy® 1200-22	单位制	测试方法
拉伸模量	--	2340	2340	2340	2340	MPa	ASTM D638
抗张强度							ASTM D638
屈服	67.0	--	--	--	--	MPa	
屈服, 23°C 4	--	60.0	60.0	60.0	60.0	MPa	
断裂	--	--	66.0	66.0	66.0	MPa	
极限	--	66.0	--	--	--	MPa	
伸长率							ASTM D638
屈服	--	6.0	6.0	6.0	6.0	%	
断裂	130	120	120	120	120	%	
弯曲模量	2250	2410	2410	2410	2410	MPa	ASTM D790
弯曲强度							ASTM D790
--	--	96.0	96.0	96.0	96.0	MPa	
屈服	93.0	--	--	--	--	MPa	
冲击性能	TRIEX® 3020HF	Lupoy® 1301-22	Lupoy® 1300-22	Lupoy® 1201-22	Lupoy® 1200-22	单位制	测试方法
悬壁梁缺口冲击强度							ASTM D256
23°C, 3.18 mm	790	--	--	--	--	J/m	
23°C, 3.20 mm 5	--	750	750	750	750	J/m	
无缺口悬臂梁冲击 (23°C)	--	无断裂	无断裂	无断裂	无断裂		ASTM D256
装有测量仪表的落镖冲击 6 (23°C, 3.20 mm, Total Energy)	--	72.0	72.0	72.0	72.0	J	ASTM D3763
硬度	TRIEX® 3020HF	Lupoy® 1301-22	Lupoy® 1300-22	Lupoy® 1201-22	Lupoy® 1200-22	单位制	测试方法
洛氏硬度							ASTM D785
M 级	--	72	72	72	72		
R 级	--	118	118	118	118		



热性能	TRIEX® 3020HF	Lupoy® 1301-22	Lupoy® 1300-22	Lupoy® 1201-22	Lupoy® 1200-22	单位制	测试方法
载荷下热变形温度							ASTM D648
0.45 MPa, 退火, 4.00 mm	--	142	142	142	142	°C	
1.8 MPa, 未退火	133	--	--	--	--	°C	
1.8 MPa, 未退火, 4.00 mm	--	126	126	126	126	°C	
1.8 MPa, 退火, 4.00 mm	--	139	139	139	139	°C	
维卡软化温度	--	147	147	147	147	°C	ASTM D1525 7
球压温度	--	> 125	> 125	> 125	> 125	°C	IEC 60598-1
线形热膨胀系数 - 流动							ASTM D696
--	5.0E-5 到 7.0E-5	--	--	--	--	cm/cm/°C	
-40 到 82°C	--	6.8E-5	6.8E-5	6.8E-5	6.8E-5	cm/cm/°C	
电气性能	TRIEX® 3020HF	Lupoy® 1301-22	Lupoy® 1300-22	Lupoy® 1201-22	Lupoy® 1200-22	单位制	测试方法
体积电阻率							ASTM D257
--	4.0E+16	--	--	--	--	ohms-cm	
23°C	--	2.0E+17	2.0E+17	2.0E+17	2.0E+17	ohms-cm	
介电强度	30	17	17	17	17	kV/mm	ASTM D149
介电常数 (60 Hz)	--	3.00	3.00	3.00	3.00		ASTM D150
耗散因数 (60 Hz)	--	1.0E-3	1.0E-3	1.0E-3	1.0E-3		ASTM D150
耐电弧性	120	--	--	--	--	sec	ASTM D495
漏电起痕指数 (2.00 mm)	--	250	250	250	250	V	IEC 60112
可燃性	TRIEX® 3020HF	Lupoy® 1301-22	Lupoy® 1300-22	Lupoy® 1201-22	Lupoy® 1200-22	单位制	测试方法
UL 阻燃等级							UL 94
0.50 mm	--	V-2	V-2	V-2	V-2		
1.6 mm	V-2	V-2	V-2	V-2	V-2		
2.5 mm	--	V-2	V-2	V-2	V-2		
2.7 mm	--	V-2	--	--	--		
3.0 mm	--	V-2	V-2	V-2	V-2		
热灯丝点火温度 8 (2.0 mm)	--	850	850	850	850	°C	IEC 60695-2-13
极限氧指数	--	26	26	26	26	%	ASTM D2863
光学性能	TRIEX® 3020HF	Lupoy® 1301-22	Lupoy® 1300-22	Lupoy® 1201-22	Lupoy® 1200-22	单位制	测试方法
折射率	--	1.586	1.586	1.586	1.586		ASTM D542
透射率	--	89.0	89.0	89.0	89.0	%	ASTM D1003
雾度	--	0.70 到 1.5	0.70 到 1.5	0.70 到 1.5	0.70 到 1.5	%	ASTM D1003

补充信息	TRIEX® 3020HF	Lupoy® 1301-22	Lupoy® 1300-22	Lupoy® 1201-22	Lupoy® 1200-22	单位制	测试方法
耐磨耗性 - Change in Haze ⁹	--	45	45	45	45	%	ASTM D1004
平均燃烧程度	--	3	3	3	3	cm	ASTM D635

注射	TRIEX® 3020HF	Lupoy® 1301-22	Lupoy® 1300-22	Lupoy® 1201-22	Lupoy® 1200-22	单位制
干燥温度	120	--	--	--	--	°C
干燥时间	3.0 到 5.0	--	--	--	--	hr
建议的最大水分含量	0.020	--	--	--	--	%
料筒后部温度	235 到 260	--	--	--	--	°C
料筒中部温度	250 到 275	--	--	--	--	°C
料筒前部温度	265 到 290	--	--	--	--	°C
射嘴温度	265 到 300	--	--	--	--	°C
加工（熔体）温度	265 到 300	--	--	--	--	°C
模具温度	65 到 105	--	--	--	--	°C
背压	0.250 到 0.700	--	--	--	--	MPa
螺杆转速	40 到 70	--	--	--	--	rpm
排气孔深度	0.020 到 0.080	--	--	--	--	mm

备注

¹ 通过这些链接您能够访问供应商资料。我们尽量保证及时更新资料；不过您可以从供应商处了解最新资料。

² UL 黄卡含有 UL 验证的易燃性和电气特性。UL Prospector 持续努力在 Prospector 中将黄卡链接至单个塑料材料，然而此列表可能未包括所有相应链接。重要的是，我们对 Prospector 中找到的这些黄卡和塑料材料之间的关联进行验证。如需完整的黄卡列表，请访问 UL 黄卡搜索。

³ 一般属性：这些不能被视为规格。

⁴ 50 mm/min

⁵ 0.25 mm 缺口深度

⁶ 3.38 m/sec

⁷ 速率 A (50°C/h), 载荷2 (50N)

⁸ 5 sec

⁹ 1000g, 500 cycles, CS-10F Wheel

购买地点	
供应商	
TRIEX® 3020HF	Samyang Corporation Seoul, Seoul South Korea 电话: +82-2-740-7114 Web: http://www.samyang.com
Lupoy® 1301-22	LG Chem Ltd. Englewood Cliffs, NJ USA 电话: 201-816-2302 Web: http://www.chemwide.com/
Lupoy® 1300-22	LG Chem Ltd. Englewood Cliffs, NJ USA 电话: 201-816-2302 Web: http://www.chemwide.com/
Lupoy® 1201-22	LG Chem Ltd. Englewood Cliffs, NJ USA 电话: 201-816-2302 Web: http://www.chemwide.com/
Lupoy® 1200-22	LG Chem Ltd. Englewood Cliffs, NJ USA 电话: 201-816-2302 Web: http://www.chemwide.com/



分销商

TRIEX® 3020HF

API-Kolon Engineering Plastics

电话: 847-550-5556

Web: <http://www.apikolon.com/>

供货地区: Mexico, North America, South America

Entec Polymers

电话: 800-375-5440

Web: <http://www.entecpolymers.com/>

供货地区: North America

ESSE International - OMYA

ESSE International - OMYA is a Pan European distribution company. Contact ESSE International - OMYA for availability of individual products by country.

电话: +33-1-30-80-56-56

Web: <http://www.omya.com>

供货地区: Europe, Turkey

GAZECHIM PLASTIQUES

GAZECHIM PLASTIQUES is a Pan European distribution company. Contact GAZECHIM PLASTIQUES for availability of individual products by country.

电话: +33-4-67-49-55-37

Web: <http://www.gazechim.com/>

供货地区: Belgium, Denmark, Finland, France, Italy, Netherlands, Norway, Poland, Romania, Spain, Sweden, United Kingdom

PolySource

电话: 866-558-5300

Web: <http://www.polysource.net/>

供货地区: North America

Resinal de México

电话: +52-55-5254-7600

Web: <http://resinal.mx/>

供货地区: Mexico



Lupoy® 1301-22

Channel Prime Alliance

电话: 800-247-8038

Web: <http://www.channelpa.com/>

供货地区: North America

Chase Plastic Services, Inc.

Chase Plastics Services is a North American distributor with representatives throughout the region. Please find your rep here:

<http://www.chaseplastics.com/contact/locations>

电话: 800-232-4273

Web: <http://www.chaseplastics.com/>

供货地区: North America

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Web: <http://www.gazechim.com/>

供货地区: Italy

Resin Resource, Inc.

电话: 877-652-3431

Web: <http://www.resinresourceinc.com/>

供货地区: North America

RESINEX Group

RESINEX is a Pan European distribution company. Contact RESINEX for availability of individual products by country.

电话: +32-14-672511

Web: <http://www.resinex.com/>

供货地区: Europe

Southland Polymers

Southland Polymers - Full Service Engineering and Commodity Resin Distribution Since 1979

电话: 562-921-0444

Web: <http://www.southlandpolymers.com/>

供货地区: Central America, North America, South America

Telko Oy

Telko Oy is a Pan European distribution company. Contact Telko Oy for availability of individual products by country.

电话: +358-9-5211

Web: <http://www.telko.com/>

供货地区: Belarus, Denmark, Estonia, Finland, Latvia, Lithuania, Norway, Poland, Sweden, Ukraine



Lupoy® 1300-22

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Web: <http://www.telko.com/>

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