

Lasty (UTR6180)

TECHNICAL

DATA SHEET

PRODUCT DESCRIPTION 产品介绍

Lasty is an ABS like SL resin which has accurate and durable features. It is designed for solid state SLA platforms. Lasty can be applied in master patterns, concept models, general parts and functional prototypes in the field of automotive, medical and consumer electronics industries. The parts durability building with Lasty is over 6.5 months. Lasty 是一种具备精确和耐久特性的类 ABS 的立体光造型树脂。它被用于固态激光的光固化成型法。Lasty 可应用于汽车，医疗，消费电子等工业领域的母模，概念模型，一般部件，功能性部件的制作。用 Lasty 树脂制造的部件的耐久性长达 6.5 个月以上。

TYPICAL FEATURES 典型特点

- Liquid resin`s medium viscosity, so easy recoating, easy clean parts and machines 中等粘度的液态树脂，确保其更容易涂层以及清洗部件和机器
- Improved strength retained, improved dimensions retention of parts in humid condition 在潮湿环境中具有更好的强度及尺寸保持特性
- need minimal part finishing 只需要极小的部件修饰
- Long shelf life in machine 更长的实际使用期限

TYPICAL BENEFITS 典型优点

- Need less part finishing time, easier post-curing 更少的部件完成时间
- Building accurate and high tough parts with an improved dimensional stability 能够建造精确和高韧性的部件并提高了部件的尺寸稳定性
- High quality controls for vacuum casting parts 对于真空铸造部件的高质量控制
- Color is more close to the ABS 颜色更加接近于 ABS
- Outstanding machinable SLA material 卓越的可加工性

Physical Properties – Liquid Material 液态材料的物理性能

| | |
|----------------------------------|-------------------------------|
| Appearance 外观 | White 白色 |
| Density 密度 | 1.13g/cm ³ @ 25 °C |
| Viscosity 粘度 | 395 cps @ 26 °C |
| Dp 固化深度 | 0.149 mm |
| Ec 临界曝光量 | 7.6 mJ/cm ² |
| Building layer thickness 建造层厚 | 0.1mm |

Mechanical Properties of Post-Cured Material 固化后材料的机械性能

| MEASUREMENT 测试项目 | TEST METHOD 测试方法 | VALUE 数值 |
|---|-------------------|----------------------------------|
| | | 90-minute UV post-cure 90 分钟紫外固化 |
| Hardness 硬度, Shore D | ASTM D 2240 | 88 |
| Flexural modulus 弯曲模量, Mpa | ASTM D 790 | 2,495-2,565 |
| Flexural strength 弯曲强度, Mpa | ASTM D 790 | 71- 76 |
| Tensile modulus 拉伸模量, MPa | ASTM D 638 | 2,511-2,665 |
| Tensile strength 拉伸强度, MPa | ASTM D 638 | 40-58 |
| Elongation at break 断裂延长率 | ASTM D 638 | 11 -16% |
| Poisson`s Ratio 泊松比 | ASTM D 638 | 0.38-0.42 |
| Impact strength notched Izod, J/m 缺口冲击强度 | ASTM D 256 | 30 - 40 |
| Heat deflection temperature, °C 热变形温度 | ASTM D 648 @66PSI | 63 |
| Glass transition,Tg 玻璃化转变温度, °C | DMA, E” peak | 75 |
| Coefficient of thermal expansion, 热膨胀系数, /°C | TMA(T<Tg) | 92*E-6 |
| Density 密度, g/cm ³ | | 1.15 |
| Dielectric Constant 介电常数 60 Hz | ASTM D 150-98 | 4.5 |
| Dielectric Constant 介电常数 1 kHz | ASTM D 150-98 | 3.9 |
| Dielectric Constant 介电常数 1 MHz | ASTM D 150-98 | 3.6 |
| Dielectric Strength 绝缘强度 kV/mm | ASTM D 1549-97a | 14.8 |

注: Lasty 使用温度和保存温度不宜过高, 请在 25 摄氏度以下使用; 推荐使用和保存温度为 18-25 摄氏度。