

Tritan™ TX2001

共聚多酯

Eastman Chemical Company

Technical Data

产品说明

Eastman Tritan(tm) TX2001 is an amorphous copolyester with excellent appearance and clarity. Tritan TX2001 contains a mold release derived from vegetable based sources. Its most outstanding features are excellent toughness, hydrolytic stability, and heat and chemical resistance. This next-generation copolyester can also be molded into various applications without incorporating high levels of residual stress. Combined with Tritan's outstanding chemical resistance and hydrolytic stability, these features give molded products enhanced durability in the dishwasher environment, which can expose products to high heat, humidity, and aggressive cleaning agents. Tritan TX2001 copolyester may be used in repeated use food contact articles under United States Food and Drug Administration (FDA) regulations. Tritan TX2001 is certified to NSF/ANSI Standard 51 for Food Equipment Materials and is also certified to NSF/ANSI Standard 61 – Drinking Water System Components-Health Effects.

Key Attributes

- Ease of processing
- Excellent clarity
- Excellent hydrolytic stability
- Fast drying times
- Good chemical resistance
- Good heat resistance
- Outstanding impact resistance
- Quick cycle times

Applications

- Appliances (food contact)
- Auto plastics
- Automotive
- Commercial housewares
- Compounders
- Consumer electronics
- Consumer housewares - food contact (FC)
- Consumer housewares-NFC
- Large appliances non-food contact
- Lighting
- Non-kitchen appliances
- Non-medical housings & hardware for elec
- Outdoor signs
- Packaging components non food contact
- Personal care & cosmetics packaging
- Process additives
- Small appliances non-food contact
- Tools
- Toys
- Water/sport bottles

总览

添加剂	• 脱模		
特性	• 高抗撞击性 • 快的成型周期 • 良好的加工性能 • 耐化学品性能，良好 • 耐热性，高	• 耐用性 • 清晰度，高 • 韧性良好 • 食品接触的合规性 • 水解稳定	• 脱模性能良好 • 外观良好 • 无定形的

总览			
用途	• 包装 • 包装，化妆品 • 电气/电子应用领域 • 电器用具 • 个人护理	• 家用货品 • 瓶子 • 汽车领域的应用 • 室外应用 • 添加剂	• 外壳 • 玩具 • 消费品应用领域 • 照明应用 • 铸模/模具/工具
机构评级	• FDA 食品接触	• NSF 51	• NSF 61
物理性能		额定值 单位制	测试方法
密度 / 比重		1.17 g/cm³	ASTM D792
收缩率 - 流动 (23°C)		0.50 到 0.70 %	ASTM D955
机械性能		额定值 单位制	测试方法
拉伸模量			
23°C		1590 MPa	ASTM D638
23°C		1620 MPa	ISO 527-1
抗张强度			
屈服, 23°C		44.0 MPa	ASTM D638
屈服, 23°C		45.0 MPa	ISO 527-2
断裂, 23°C		53.0 MPa	ASTM D638
断裂, 23°C		49.0 MPa	ISO 527-2
伸长率			
屈服, 23°C		7.0 %	ASTM D638 ISO 527-2
断裂, 23°C		140 %	ASTM D638
断裂, 23°C		130 %	ISO 527-2
弯曲模量			
23°C		1590 MPa	ASTM D790
23°C		1530 MPa	ISO 178
弯曲强度 (屈服, 23°C)		66.0 MPa	ASTM D790
冲击性能		额定值 单位制	测试方法
悬壁梁缺口冲击强度			
23°C		650 J/m	ASTM D256
-40°C		14 kJ/m²	ISO 180
23°C		66 kJ/m²	ISO 180
无缺口悬臂梁冲击 (23°C)		无断裂	ASTM D4812
硬度		额定值 单位制	测试方法
洛氏硬度 (R 级, 23°C)		115	ASTM D785
热性能		额定值 单位制	测试方法
载荷下热变形温度			ASTM D648
0.45 MPa, 未退火		109 °C	
1.8 MPa, 未退火		92.0 °C	
光学性能		额定值 单位制	测试方法
透射率 (总计)		92.0 %	ASTM D1003
雾度		< 1.00 %	ASTM D1003
注射		额定值 单位制	
干燥温度		88 °C	
干燥时间		4.0 到 6.0 hr	
加工 (熔体) 温度		260 到 282 °C	
模具温度		38 到 66 °C	