

Baydur® 728 IBS (55 pcf)

聚氨酯 (MDI)

Bayer MaterialScience LLC - PUR

PROSPECTOR®

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Technical Data

产品说明			
Baydur 728 IBS is a high-density polyurethane structural foam system used in the reaction injection molding (RIM) process. This system incorporates a specially engineered interactive blowing system (IBS) and internal mold release (IMR). The system is supplied as two reactive liquid components: Component A is a polymeric diphenylmethane diisocyanate (PMDI), and Component B is a formulated polyol system containing no CFC- or HCFC- blowing additives. Note: Component B phase separates upon standing and must be mixed thoroughly via mechanical means prior to use.			
Baydur 728 IBS system is used in applications requiring a UL94 flammability rating* of V-0 and/or 5VA for use in electronic, equipment housing, and appliance markets. The applications typically take advantage of the material's strength, excellent surface finish, and large-part capability. As with any product, use of Baydur 728 IBS system in a given application must be tested (including but not limited to field testing) in advance by the user to determine suitability.			
总体			
材料状态	• 已商用：当前有效		
资料 ¹	• Technical Datasheet (English)		
UL 黄卡 ²	• E61384-475117 • E61384-475574		
搜索 UL 黄卡	• Bayer MaterialScience LLC - PUR • Baydur®		
供货地区	• 北美洲		
添加剂	• 发泡剂 • 脱模		
特性	• 良好的强度 • 优良外观		
用途	• 电气/电子应用领域 • 电器用具 • 外壳		
加工方法	• 反应注射成型 (RIM)		
物理性能	额定值 (英制)	额定值 (公制)	测试方法
收缩率 - 流动 (0.250 in (6.35 mm))	7.0E-3 到 9.0E-3 in/in	0.70 到 0.90 %	ASTM D955
机械性能	额定值 (英制)	额定值 (公制)	测试方法
抗张强度			ASTM D638
断裂, 0.125 in (3.18 mm)	3300 psi	22.8 MPa	
断裂, 0.156 in (3.96 mm)	5100 psi	35.2 MPa	
断裂, 0.250 in (6.35 mm)	4410 psi	30.4 MPa	
伸长率			ASTM D638
断裂, 0.125 in (3.18 mm)	6.0 %	6.0 %	
断裂, 0.156 in (3.96 mm)	10 %	10 %	
断裂, 0.250 in (6.35 mm)	9.0 %	9.0 %	
弯曲模量			ASTM D790
0.125 in (3.18 mm)	223000 psi	1540 MPa	
0.156 in (3.96 mm)	255000 psi	1760 MPa	
0.250 in (6.35 mm)	239000 psi	1650 MPa	
弯曲强度			ASTM D790
0.125 in (3.18 mm)	8100 psi	55.8 MPa	
0.156 in (3.96 mm)	9890 psi	68.2 MPa	
0.250 in (6.35 mm)	8500 psi	58.6 MPa	
冲击性能	额定值 (英制)	额定值 (公制)	测试方法
简支梁无缺口冲击强度			
-- ⁴	12 ft-lb/in ²	25 kJ/m ²	内部方法
-- ⁵	9.0 ft-lb/in ²	19 kJ/m ²	内部方法
悬壁梁缺口冲击强度			ASTM D256
0.125 in (3.18 mm)	0.40 ft-lb/in	21 J/m	
0.156 in (3.96 mm)	0.50 ft-lb/in	27 J/m	
0.250 in (6.35 mm)	0.50 ft-lb/in	27 J/m	



冲击性能	额定值 (英制)	额定值 (公制)	测试方法
无缺口悬臂梁冲击			ASTM D256
0.125 in (3.18 mm)	3.0 ft-lb/in	160 J/m	
0.156 in (3.96 mm)	4.0 ft-lb/in	210 J/m	
0.250 in (6.35 mm)	3.0 ft-lb/in	160 J/m	
热性能	额定值 (英制)	额定值 (公制)	测试方法
载荷下热变形温度			ASTM D648
66 psi (0.45 MPa), 未退火, 0.125 in (3.18 mm)	158 °F	70.0 °C	
66 psi (0.45 MPa), 未退火, 0.156 in (3.96 mm)	176 °F	80.0 °C	
66 psi (0.45 MPa), 未退火, 0.250 in (6.35 mm)	212 °F	100 °C	
线形热膨胀系数 - 流动			ASTM D696
158°F (70°C), 0.125 in (3.18 mm)	6.1E-5 in/in/°F	1.1E-4 cm/cm/°C	
158°F (70°C), 0.156 in (3.96 mm)	5.6E-5 in/in/°F	1.0E-4 cm/cm/°C	
158°F (70°C), 0.250 in (6.35 mm)	5.0E-5 in/in/°F	9.0E-5 cm/cm/°C	
可燃性	额定值 (英制)	额定值 (公制)	测试方法
UL 阻燃等级			UL 94
0.125 in (3.18 mm)	• V-0 • 5VA	• V-0 • 5VA	
0.156 in (3.96 mm)	• V-0 • 5VA	• V-0 • 5VA	
0.250 in (6.35 mm)	• V-0 • 5VA	• V-0 • 5VA	
热固性	额定值 (英制)	额定值 (公制)	
热固组件			
部件 A	按重量计算的混合 比: 140, 按容量计算的混合 比: 120	按重量计算的混合 比: 140, 按容量计算的混合 比: 120	
部件 B	按重量计算的混合 比: 100, 按容量计算的混合 比: 100	按重量计算的混合 比: 100, 按容量计算的混合 比: 100	
补充信息			
Part A			
• Type: Isocyanate			
• Appearance: Dark brown liquid			
• Specific Gravity @ 25°C: 1.24			
• Viscosity @25°C: 200 cps			
• Flash Point PMCC: 199°C			
Part B			
• Type: Polyol			
• Appearance: Pale amber liquid			
• Specific Gravity @ 25°C: 1.108			
• Viscosity @25°C: 1000 cps			
• Flash Point PMCC: 161°C			
Material Temperatures: 27 to 35°C			
Mold Temperature: 66 to 76°C			
Hand Mix Reactivity at 25°C			
• Cream Time: 19 to 29 sec			
• Gel Time: 28 to 39 sec			
• Tack Free Time: to 34 to 48 sec			
• Free-Rise Density: 12 to 20 lb/ft³			
Machine Reactivity at 30°C			
• Cream Time: 6 to 12 sec			



- Gel Time: 15 to 19 sec
- Tack Free Time: 19 to 22 sec
- Free-Rise Density: 15 to 20 lb/ft³

Polyol Nucleation Specific Gravity: 0.85 to 0.90 0
Maximum Shot Time: 7 sec
Typical cure Time, 0.250 in Thickness: 3 to 4

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 0.125 in

⁵ 0.25 in



购买地点

供应商

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分销商

请联系供应商以便为 Baydur® 728 IBS (55 pcf) 查找分销商

