Zytel® ET409ACS NAT1 (PRELIMINARY)

NYLON RESIN

Zytel® 尼龙树脂的常见特性包括机械和物理性能，如高机械强度、良好的刚性与韧性平衡、优异的高温性能、良好的电气和阻燃性能、优异的耐磨性和耐化学性。此外，Zytel® 尼龙树脂提供多种改性和增强等级，可用于制造具备特定工艺和最终用途所需性能的各种产品。包括大多数阻燃等级在内的 Zytel® 尼龙树脂，可以进行着色处理。

Zytel® 尼龙树脂良好的熔体稳定性通常可以使适当处理的生产废料实现回收利用。如果无法回收，我们建议优先选择在适当设备中进行废料焚烧并回收能源（每克基础聚合物释放约 -31kJ 的能量）。在处置时须遵守当地法规。

Zytel® 尼龙树脂通常用于汽车、家具、家用电器、运动器材和建筑等要求较高的应用领域。

Zytel® ET409ACS NAT1 是一种中等韧性、高性能、耐热稳定的尼龙 66 树脂，具有良好的韧性、颜色稳定性及出色的加工性能。

产品信息

树脂鉴别	PA66-I	ISO 1043
制品标识码	>PA66-I<	ISO 11469

流变性能

	dry/cond.		
模塑收缩率, 平行	1.7/-	%	ISO 294-4, 2577
模塑收缩率, 垂直	1.7/-	%	ISO 294-4, 2577

机械性能

	dry/cond.		
拉伸模量	2400/-	MPa	ISO 527-1/-2
拉伸屈服应力, 50mm/min	61/-	MPa	ISO 527-1/-2
屈服伸长率, 50mm/min	6/-	%	ISO 527-1/-2
拉伸断裂应力, 50mm/min	55/-	MPa	ISO 527-1/-2
断裂伸长率, 50mm/min	45/-	%	ISO 527-1/-2
简支梁缺口冲击强度, 23°C	22/-	kJ/m²	ISO 179/1eA

热性能

	dry/cond.		
熔融温度, 10°C/min	262/*	°C	ISO 11357-1/-3
玻璃化转变温度, 10°C/min	80/20	°C	ISO 11357-1/-3
热变形温度, 1.8 MPa	65/*	°C	ISO 75-1/-2

其它性能

	dry/cond.		
吸湿率, 2mm	2.1/*	%	类似ISO 62
吸水率, 浸泡 24小时	0.9/*	%	类似ISO 62
密度	1100/-	kg/m³	ISO 1183

注塑

建议干燥	是	
干燥温度	80	°C
干燥时间，除湿干燥机	2 - 4	h
加工前水分含量	≤ 0.2	%
最优熔体温度	285	°C
最低熔体温度***	270	°C
最高熔体温度	300	°C
螺杆最大切线速度	≤ 0.3	m/s

Revised: 2026-03-26 Source: Celanese Materials Database

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最优模具温度	70	°C
最低模具温度	50	°C
最高模具温度	90	°C
保压范围	50 - 100	MPa
保压时间	4	s/mm
保压时间 (h表示部件的最大壁厚mm)	h^2+2	s
顶出温度	220	°C

挤出成型

干燥温度	≤ 80	°C
干燥时间，除湿干燥机	2 - 4	h
加工前水分含量	≤ 0.2	%
最优熔体温度	290	°C
熔体温度范围	280 - 300	°C

特性

加工方法	注塑
添加剂	防老剂
特殊性能	抗冲改性

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The above data are preliminary and are subject to change as additional data are developed on subsequent lots.
NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colourants or other additives may cause significant variations in data values. Properties of moulded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design, processing conditions and environmental exposure. Other than those products expressly identified as medical grade (including by MT® product designation or otherwise), Celanese's products are not intended for use in medical or dental implants. Regardless of any such product designation, any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use. To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy and completeness of such information. The information contained in this publication should not be construed as a promise or guarantee of specific properties of our products. It is the sole responsibility of the users to investigate whether any existing patents are infringed by the use of the materials mentioned in this publication. Moreover, there is a need to reduce human exposure to many materials to the lowest practical limits in view of possible adverse effects. To the extent that any hazards may have been mentioned in this publication, we neither suggest nor guarantee that such hazards are the only ones that exist. We recommend that persons intending to rely on any recommendation or to use any equipment, processing technique or material mentioned in this publication should satisfy themselves that they can meet all applicable safety and health standards. We strongly recommend that users seek and adhere to the manufacturer's current instructions for handling each material they use, and entrust the handling of such material to adequately trained personnel only. Please call the telephone numbers listed for additional technical information. Call Customer Services for the appropriate Materials Safety Data Sheets (MSDS) before attempting to process our products.
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