

Product Information

Jan 2019

Ultramid® Advanced N4H **- Preliminary - Polyamide PA9T**


Product Description

- Preliminary Product - Ultramid Advanced N4H is a partially aromatic polyphthalamide for injection molding and extrusion with strong mechanical properties especially at elevated temperatures, good long-term thermal stability and excellent chemical resistance for highly stressed parts. This material has high toughness, extremely low water absorption, outstanding dimensional stability and very good wear/sliding friction properties. It features a high melting point (300C) and excellent melt stability.

PHYSICAL	ISO Test Method	Property Value	
Density, g/cm ³	1183	1.13	
Mold Shrinkage, parallel, %	294-4	1.74	
Mold Shrinkage, normal, %	294-4	1.82	
Moisture, %	62		
(Saturation)		2.5	
MECHANICAL	ISO Test Method	Dry	Conditioned
Tensile Modulus, MPa	527		
23C		2,600	2,600
Tensile stress at yield, MPa	527		
23C		90	90
Tensile stress at break, MPa	527		
23C		65	70
Tensile strain at yield, %	527		
23C		>5	>5
Flexural Modulus, MPa	178		
23C		2,600	2,700
IMPACT	ISO Test Method	Dry	Conditioned
Charpy Notched, kJ/m ²	179		
-40C		8	-
-30C		8	6
23C		6	6
Charpy Unnotched, kJ/m ²	179		
-30C		130	40
23C		N	50
THERMAL	ISO Test Method	Dry	Conditioned
Melting Point, C	3146	300	-
HDT A, C	75	130	-

Processing Guidelines
Material Handling

Max. Water content: 0.05%

Product is supplied in sealed containers and drying prior to molding is not required. If drying becomes necessary, a dehumidifying or desiccant dryer operating at 120C (248F) for 8 hours is recommended. Drying time is dependent on moisture level, improperly stored material may require extended drying time. Further information concerning safe handling procedures can be obtained from the Safety Data Sheet. Alternatively, please contact your BASF representative.

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Ultramid® Advanced N4H



Typical Profile

Melt Temperature 320-340C (608-644F)

Mold Temperature 100-160C (212-320F)

Note

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