

Ultraform® H 4320 UNC Q600

Polyoxymethylene



Product Description

Ultraform H 4320 UNC Q600 is an extrusion POM high molecular weight grade. This grade enables high extrusion rates with thick-walled product. It also exhibits high thermal stability and a low tendency to discolor.

Applications

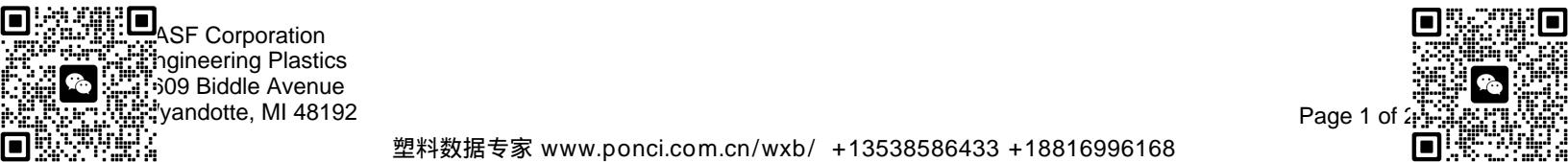
Typical applications include pipe and semi-finished parts for gear wheels, bearings and other mechanical elements.

PHYSICAL	ASTM Test Method	Property Value
Specific Gravity	D-792	1.39
Mold Shrinkage (1/8" bar, in/in)		0.02
Moisture, %	D-570	
(50% RH)		0.2
(Saturation)		0.8
MECHANICAL	ASTM Test Method	Property Value
Tensile Strength, Yield, MPa (psi)	D-638	
23C (73F)		63 (9,130)
Elongation, Yield, %	D-638	
23C (73F)		10
Flexural Modulus, MPa (psi)	D-790	
23C (73F)		2,410 (349,000)
IMPACT	ASTM Test Method	Property Value
Notched Izod Impact, J/M (ft-lbs/in)	D-256	
-40C (-40F)		69.4 (1.3)
23C (73F)		80.1 (1.5)
THERMAL	ASTM Test Method	Property Value
Melting Point, C(F)	D-3418	166 (330)
Heat Deflection @ 264 psi (1.8 MPa) C(F)	D-648	96 (204)
Heat Deflection @ 66 psi (.45 MPa) C(F)	D-648	154 (309)
Coef. of Linear Thermal Expansion, mm/mm C (in/in F)	E-831	0.6 X10-4
ELECTRICAL	ASTM Test Method	Property Value
Volume Resistivity, 1.5 mm	D-257	1E13
Surface Resistivity, 1.5 mm	D-257	1E13

Processing Guidelines

Material Handling

Max. Water content: 0.15%



BASF Corporation
Engineering Plastics
609 Biddle Avenue
Ypsilanti, MI 48192

Ultraform® H 4320 UNC Q600



Product is supplied in polyethylene bags and drying prior to molding is not required. However, after relatively long storage or when handling material from previously opened containers, preliminary drying is recommended in order to remove any moisture which has been absorbed. If drying is required, a dehumidifying or desiccant dryer operating at 80 - 110 degC (176 - 230 degF) is recommended. Drying time is dependent on moisture level, but 2-4 hours is generally sufficient. Further information concerning safe handling procedures can be obtained from the Material Safety Data Sheet. Alternatively, please contact your BASF representative.

Typical Profile

Melt Temperature 175-200 degC (347-392 degF)

Typical Barrel Profile (degC):

Rear 170 degC (338 degF)
Middle 180 degC (356 degF)
Front 200 degC (392 degF)

Adaptor 175 degC (347 degF)
Die 175 degC (347 degF)

Screw Parameters

Metering Section	40%
Transition Section	3 to 5 flights
Feed Section	balance of screw length
Compression Ratio	3:1
L/D Ratio	20:1 to 25:1

Tooling & Sizing

Die to Finished Tube dia. 2.0-4.0:1

Selection of pin and die size will be dependent on the material viscosity. In general, the ratio of die size to finished tube diameter is about 2.0-4.0:1. The mandrel (pin) size is determined the same way in relation to the inner tube diameter.

Note

Although all statements and information in this publication are believed to be accurate and reliable, they are presented gratis and for guidance only, and risks and liability for results obtained by use of the products or application of the suggestions described are assumed by the user. NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH. Statements or suggestions concerning possible use of the products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that toxicity data and safety measures are indicated or that other measures may not be required.



BASF Corporation
Engineering Plastics
609 Biddle Avenue
Yandotte, MI 48192

塑料数据专家 www.ponci.com.cn/wxb/ +13538586433 +18816996168

