NORYL™ Resin HM3020H

REGION ASIA

DESCRIPTION

NORYL HM3020H resin is a 30% glass fiber and mineral reinforced blend of polyphenylene ether (PPE) + polystyrene (PS). This high flow, injection moldable grade contains non-brominated, non-chlorinated flame retardant and carries a UL94 flame ratings of 5VB and V1. NORYL HM3020H resin exhibits good dimensional stabily, Low warpage, and low moisture absorption. It is an excellent candidate for printer chassis and components.

GENERAL INFORMATION	
Features	Flame Retardant, High Flow, Hydrolytic Stability, Low Warpage, Amorphous, Low Shrinkage, Low Moisture Absorption, Low Specific Gravity, Non Cl/Br flame retardant, Non halogenated flame retardant, Dimensional stability, High stiffness/Strength, No PFAS intentionally added
Fillers	Mineral, Glass Fiber (Total fluorine >50ppm only from inorganic fluorine)
Polymer Types	Polyphenylene Ether + PS (PPE+PS)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Consumer	Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield	115	MPa	SABIC - Japan Method
Tensile Strain, break	4 – 6	%	SABIC - Japan Method
Flexural Stress	147	MPa	ASTM D790
Flexural Modulus	7940	MPa	ASTM D790
Hardness, Rockwell M	88	-	ASTM D785
IMPACT [1]			
Izod Impact, notched, 23°C	58	J/m	ASTM D256
THERMAL [1]			
HDT, 1.82 MPa, 6.4 mm, unannealed	125	°C	ASTM D648
CTE, -30°C to 30°C	0.000024 – 0.000034	1/°C	TMA
PHYSICAL [1]			
Specific Gravity	1.33	-	ASTM D792
Water Absorption, (23°C/24hrs)	0.06	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm [2]	0.25 – 0.3	%	SABIC method
Melt Flow Rate, 300°C/2.16 kgf	17.7	g/10 min	ASTM D1238
ELECTRICAL [1]			
Surface Resistivity	1.E+16	Ω	ASTM D257
INJECTION MOLDING [3]			
Drying Temperature	80 – 100	°C	

© 2026 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Time	2 – 4	Hrs	
Melt Temperature	275 – 305	°C	
Nozzle Temperature	275 – 305	°C	
Front - Zone 3 Temperature	270 – 290	°C	
Middle - Zone 2 Temperature	260 – 280	°C	
Rear - Zone 1 Temperature	250 – 270	°C	
Mold Temperature	80 – 100	°C	
Back Pressure	0.5 – 1.2	MPa	
Screw Speed	40 – 60	rpm	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

© 2026 Copyright by SABIC. All rights reserved