Grilon® BR 40 W

Polyamide 6

EMS-GRIVORY

Message:

Grilon® BR 40 W is a Polyamide 6 (Nylon 6) material. It is available in Africa & Middle East, Asia Pacific, Europe, Latin America, or North America for extrusion or injection molding.
Important attributes of Grilon® BR 40 W are:
Flame Rated
RoHS Compliant
Plasticized
High Viscosity
Medium Viscosity
Typical applications include:
Automotive
Consumer Goods
Electrical/Electronic Applications
Engineering/Industrial Parts
Hose/Tubing

General Information	
Additive	Plasticizer
Features	High Viscosity Medium Viscosity Plasticized
Uses	Automotive Applications Consumer Applications Electrical/Electronic Applications Engineering Parts Hydraulic Applications Industrial Applications Pneumatic Applications Power/Other Tools Tubing Wire & Cable Applications
RoHS Compliance	RoHS Compliant
Forms	Granules
Processing Method	Extrusion Injection Molding

Physical	Dry	Conditioned	Unit	Test Method
Density	1.12	--	g/cm³	ISO 1183
Water Absorption				ISO 62

Saturation, 23°C	8.0	--	%	
Equilibrium, 23°C, 50% RH	2.5	--	%	
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Ball Indentation Hardness	55.0	30.0	MPa	ISO 2039-1
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	1300	500	MPa	ISO 527-2
Tensile Stress (Yield)	40.0	30.0	MPa	ISO 527-2
Tensile Strain (Yield)	35	40	%	ISO 527-2
Nominal Tensile Strain at Break	> 50	> 50	%	ISO 527-2
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	3.0	3.0	kJ/m²	
23°C	15 kJ/m²	No Break		
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	No Break	No Break		
23°C	No Break	No Break		
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				
0.45 MPa, Unannealed	110	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	45.0	--	°C	ISO 75-2/A
Continuous Use Temperature				Internal Method
-- [1]	70.0 to 90.0	--	°C	
-- [2]	160	--	°C	
Melting Temperature [3]	220	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow	1.1E-4	--	cm/cm/°C	
Transverse	1.6E-4	--	cm/cm/°C	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	--	1.0E+10	ohms	IEC 60093
Volume Resistivity	1.0E+13	1.0E+12	ohms·cm	IEC 60093
Electric Strength	26	22	kV/mm	IEC 60243-1
Comparative Tracking Index	--	450	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flammability Classification (0.800 mm)	HB	--		IEC 60695-11-10, -20
Additional Information	**Dry**	**Conditioned**		**Test Method**
ISO Type	PA6-P, E, 24-010	--		ISO 1874
NOTE				

1.	Long Term
2.	Short Term
3.	10°C/min

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China