

# RESOLE FM 4029F

Phenolic

Vyncolit N.V.

## Message:

RESOLE FM 4029F is a phenolic (Phenolic) material, which contains a glass fiber reinforced material. This product is available in North America, Africa and the Middle East, Latin America, Europe or Asia Pacific. The processing methods are: resin transfer molding, compression molding or injection molding. The main features of RESOLE FM 4029F are:

- chemical resistance
- high strength
- Creep resistance
- Good dimensional stability
- Good toughness

Typical application areas include:

- Electrical/electronic applications
- engineering/industrial accessories
- electrical appliances
- House
- Tools

General Information	
Filler / Reinforcement	Glass fiber reinforced material
Features	Ultra high toughness
	Good dimensional stability
	Low smoke
	High strength
	Antibacterial property
	Solvent resistance
	Good creep resistance
	alkali resistance
	acid resistance
Uses	Membrane key switch
	Pump parts
	Gear
	Electrical/Electronic Applications
	Electrical appliances
	Power/other tools
	Connector
	Application in Automobile Field
	Shell
Agency Ratings	ASTM D 5948, Type MFH
Forms	Particles
Processing Method	Resin transfer molding

Compression molding

Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	2.11	g/cm <sup>3</sup>	ASTM D792
Bulk Factor	2.1		ASTM D1895
Molding Shrinkage - Flow (Compression Molded)	0.10	%	ASTM D955
Water Absorption (23°C, 24 hr)	0.10	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (E-Scale)	80		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	44.8	MPa	ASTM D638
Flexural Modulus	20700	MPa	ASTM D790
Flexural Strength	103	MPa	ASTM D790
Compressive Strength	172	MPa	ASTM D695
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	21	J/m	ASTM D256A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	243	°C	ASTM D648
CLTE - Flow	1.3E-5	cm/cm/°C	ASTM D696
Injection	Nominal Value	Unit	
Rear Temperature	60.0	°C	
Middle Temperature	73.9	°C	
Nozzle Temperature	87.8	°C	
Processing (Melt) Temp	98.9 - 116	°C	
Mold Temperature	166 - 188	°C	
Back Pressure	0.207	MPa	
Injection instructions			

Plastication: 50rpm  
Injection Pressure: Set to give 3 to 5 seconds injection time  
Hold Pressure: 50 to 100% of injection pressure  
Hold Time: 10 sec minimum  
Cure Time, 0.125 in: 30 to 35 sec  
Water Absorption, ASTM D570, 48 hrs, 50°C: 0.15%  
DTUL @264psi - Unannealed, ASTM D648, Post Baked: 550°F  
Bulk Factor, ASTM D1895: 1.8 to 2.3  
Compression and Transfer Molding Conditions:  
Preforming Pressure: 8000 to 12000 psi  
Preheat Temperature: 210 to 235 °F  
Preheat Time: 45 sec  
Mold Temperature: 330 to 360 °F  
Compression Mold Pressure: 2500 to 5000 psi  
Transfer Mold Pressure: 4000 to 6000 psi  
Cure Time, 0.125 in: 40 to 50 sec

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

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

