# Grivory® HT1V-4 FWA black 9225

Polyamide 61/6T Copolymer EMS-GRIVORY

#### **Technical Data**

#### **Product Description**

Grivory® HT1V-4 FWA black 9225 is a Polyamide 6I/6T Copolymer (Nylon 6I/6T) material filled with 40% glass fiber. It is available in Africa & Middle East, Asia Pacific, Europe, Latin America, or North America for injection molding.

Important attributes of Grivory® HT1V-4 FWA black 9225 are:

- Flame Rated
- RoHS Compliant
- Food Contact Acceptable
- UV Resistant

Typical applications include:

- Plumbing/Piping/Potable Water
- Food Contact Applications
- Consumer Goods
- Household Applications
- Industrial Applications

#### General Material Status · Commercial: Active · Processing - Injection (German) Literature<sup>1</sup> Technical Datasheet (English) • E53898-101096145 UL Yellow Card<sup>2</sup> • E53898-101096146 EMS-GRIVORY Search for UL Yellow Card • Grivory® · Africa & Middle East • Europe Availability North America Asia Pacific Latin America Filler / Reinforcement Glass Fiber, 40% Filler by Weight Food Contact Acceptable · Hydrolysis Resistant UV Resistant Features Consumer Applications Industrial Applications Uses · Household Goods Medical Devices • ACS · FDA Food Contact • NSF STD-61 • DVGW W270 Agency Ratings KTW WRAS • NSF STD-51 · EU Food Contact **RoHS** Compliance · RoHS Compliant Black Appearance Granules Forms Processing Method Injection Molding ISO Type (ISO 1874) • PA6T/6I, MH, 12-140, GF40

Physical	Dry	Conditioned	Unit	Test Method
Density	1.53		g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.60		%	
Flow	0.10		%	
Water Absorption				ISO 62
Saturation, 23°C	3.5		%	
Equilibrium, 23°C, 50% RH	1.5		%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	14500	14000	MPa	ISO 527-1
Tensile Stress (Break)	220	210	MPa	ISO 527-2
Tensile Strain (Break)	2.0	2.0	%	ISO 527-2



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## Grivory® HT1V-4 FWA black 9225

Polyamide 6I/6T Copolymer

**EMS-GRIVORY** 

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Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	8.0	8.0	kJ/m²	
23°C	8.0	8.0	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	70	70	kJ/m²	
23°C	70	70	kJ/m²	
Hardness	Dry	Conditioned	Unit	Test Method
Ball Indentation Hardness	310	300	MPa	ISO 2039-1
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
1.8 MPa, Unannealed	280		°C	ISO 75-2/A
8.0 MPa, Unannealed	200		°C	ISO 75-2/C
Continuous Use Temperature				
4	140		°C	ISO 2578
5	270		°C	Internal Method
Melting Temperature <sup>6</sup>	325		°C	ISO 11357-3
CLTE				ISO 11359-2
Flow	1.5E-5		cm/cm/°C	
Transverse	5.0E-5		cm/cm/°C	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity		1.0E+12	ohms	IEC 60093
Volume Resistivity	1.0E+13	1.0E+13	ohms∙cm	IEC 60093
Electric Strength	30	30	kV/mm	IEC 60243-1
Comparative Tracking Index		600	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flammability Classification (0.8 mm)	HB			IEC 60695-11-10, -20

#### Notes

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

<sup>3</sup> Typical properties: these are not to be construed as specifications.

<sup>4</sup> Long Term

<sup>5</sup> Short Term

<sup>6</sup> 10°C/min



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### Grivory® HT1V-4 FWA black 9225 Polyamide 6I/6T Copolymer

EMS-GRIVORY

#### Where to Buy

#### Supplier

EMS-GRIVORY Sumter, Sumter USA Telephone: 803-481-6171 Web: http://www.emsgrivory.com/

#### Distributor

Conventus Polymers Telephone: 973-343-7669 Web: http://www.conventuspolymers.com/ Availability: North America

**Entec Polymers** 

Telephone: 833-319-0299 Web: https://www.entecpolymers.com/?utm\_source=ul&utm\_medium=paid%20association&utm\_campaign=entec%20%7C%20entec %201&utm\_term=ul%20%7C%20where%20to%20buy Availability: North America

Entec Polymers Latin America

Contact Entec Polymers for availability of individual products by country. Web: https://www.entecpolymers.com/ Availability: Latin America

PolySource

PolySource is a North American resin and plastics distributor. Please feel to reach out to your Technical Sales Account Manager. https:// polysource.net/our-team/ Telephone: 866-558-5300 Web: http://www.polysource.net/ Availability: North America

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