

# Grivory HTM-4H1 PA6T/6I-MD40

# EMS-GRIVORY | a unit of EMS-CHEMIE AG

# Product Texts

Product designation according to ISO 1874: PA 6T/6I, MH, 12-070, MD40

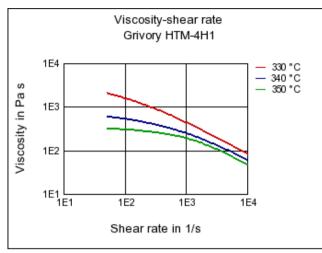
Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	7500 / 7500	MPa	ISO 527-1/-2
Stress at break	105 / 105	MPa	ISO 527-1/-2
Strain at break	1.5 / 1.5	%	ISO 527-1/-2
Charpy impact strength (+23°C)	50 / 50	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	20 / 25	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	5/5	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	3/4	kJ/m²	ISO 179/1eA
Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Ball indentation hardness	260 / 260	MPa	ISO 2039-1
Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	325 / -	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	145 / -	<u>°C</u>	ISO 75-1/-2
Temp. of deflection under load (8.00 MPa)	115/-	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	50 / -	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	50 / -	E-6/K	ISO 11359-1/-2
Burning Behav. at thickness h	HB/-	class	IEC 60695-11-10
Thickness tested	0.8 / -	mm	IEC 60695-11-10
Max. usage temperature (long term)	140	°C	ISO 2578
Max. usage temperature (short term)	270	°C	EMS
		-	
Electrical properties	dry / cond	Unit	Test Standard
Volume resistivity	1E11 / 1E11	Ohm*m	IEC 60093
Surface resistivity	-/1E12	Ohm	IEC 60093
Electric strength	32 / 32	kV/mm	IEC 60243-1
Comparative tracking index	- / 575	-	IEC 60112
Other properties	dry / cond	Unit	Test Standard
Water absorption	3.5 / -	%	Sim. to ISO 62
Humidity absorption	1.5 / -	%	Sim. to ISO 62
Density	1550 / -	kg/m³	ISO 1183
Rheo/Phys properties	dry / cond	Unit	Test Standard
		%	ISO 294-4, 2577
Molding shrinkage (parallel)	0.7 / -	70	130 294-4, 2377

## Diagrams

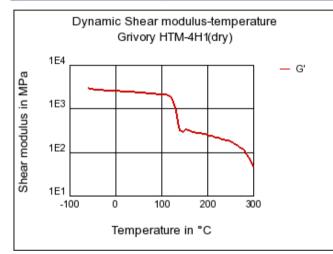
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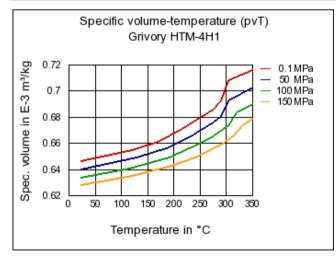




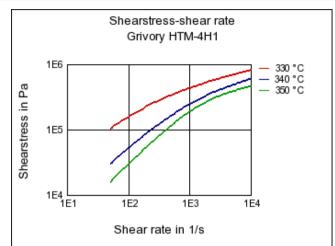
# Dynamic Shear modulus-temperature



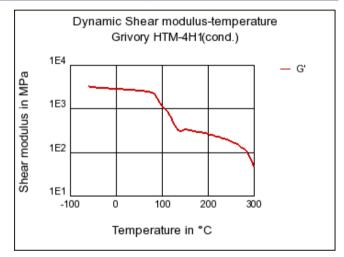
Specific volume-temperature (pvT)



Shearstress-shear rate



# Dynamic Shear modulus-temperature



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# Characteristics

Processing	Automotive	
njection Molding	Fuel systems, Powertrain and Chassis , Interior	
Delivery form	Industry & Consumer goods	
Granules	Housewares, Hydraulics & Pneumatics, Mechanical Engineering, Power transmission, Sports & Leisure, Tools & Accessories	
Special Characteristics		
Improved heat resistance	Potable Water Contact	
	NSF 61	
Regional Availability		
North America, Europe, Asia Pacific, South and Central America, Near East/Africa Chemical Media Resistance		
Acids		
🙂 Acetic Acid (5% by mass) (23°C)		
U Lactic Acid (10% by mass) (23°C)		
Hydrochloric Acid (36% by mass) (23°C)		
Nitric Acid (40% by mass) (23°C)		
Sulfuric Acid (38% by mass) (23°C)		

- Sulfuric Acid (5% by mass) (23°C)
- Chromic Acid solution (40% by mass) (23°C)

# Bases

- Sodium Hydroxide solution (35% by mass) (23°C)
- Sodium Hydroxide solution (1% by mass) (23°C)
- Ammonium Hydroxide solution (10% by mass) (23°C)

# Alcohols

- Isopropyl alcohol (23°C)
- United Methanol (23°C)
- UEthanol (23°C)

## Hydrocarbons

- 🥴 n-Hexane (23°C)
- United Toluene (23°C)
- 🥶 iso-Octane (23°C)

# Ketones

etone (23°C)

## Ethers

Uiethyl ether (23°C)

## Mineral oils

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- SAE 10W40 multigrade motor oil (23°C)
- UNACE SAE 10W40 multigrade motor oil (130°C)
- USAE 80/90 hypoid-gear oil (130°C)
- 🙂 Insulating Oil (23°C)

# Standard Fuels

- USO 1817 Liquid 1 (60°C)
- 900 (60°C) ISO 1817 Liquid 2
- 🤨 ISO 1817 Liquid 3 (60°C)
- USO 1817 Liquid 4 (60°C)
- Standard fuel without alcohol (pref. ISO 1817 Liquid C) (23°C)
- Standard fuel with alcohol (pref. ISO 1817 Liquid 4) (23°C)
- Uiesel fuel (pref. ISO 1817 Liquid F) (23°C)
- Diesel fuel (pref. ISO 1817 Liquid F) (90°C)
- Uiesel fuel (pref. ISO 1817 Liquid F) (>90°C)

# Salt solutions

- Sodium Chloride solution (10% by mass) (23°C)
- Sodium Hypochlorite solution (10% by mass) (23°C)
- Sodium Carbonate solution (20% by mass) (23°C)
- Sodium Carbonate solution (2% by mass) (23°C)
- Unc Chloride solution (50% by mass) (23°C)

## Other

- ethyl Acetate (23°C)
- UNIX Hydrogen peroxide (23°C)
- 00T No. 4 Brake fluid (130°C)
- Ethylene Glycol (50% by mass) in water (108°C)
- 1% nonylphenoxy-polyethyleneoxy ethanol in water (23°C)
- Uniter (23°C)
- Deionized water (90°C)
- Phenol solution (5% by mass) (23°C)

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