release 04/1998

Gelon™ *profile*

tents | overview | welcome | update

GE Plastics

Gelon™ *profile*

release 04/1998

Contents

1 Introduction

Gelon™ High Quality Polyamide

Gelon™, a high quality polyamide, is the latest addition to GE Plastics' product portfolio. Through its introduction, the company offers an even broader range of engineering thermoplastics. Polyamide is the most widely used engineering thermoplastic because it provides an excellent combination of easy processing, high impact strength, thermal performance and electrical properties for a reasonable price.

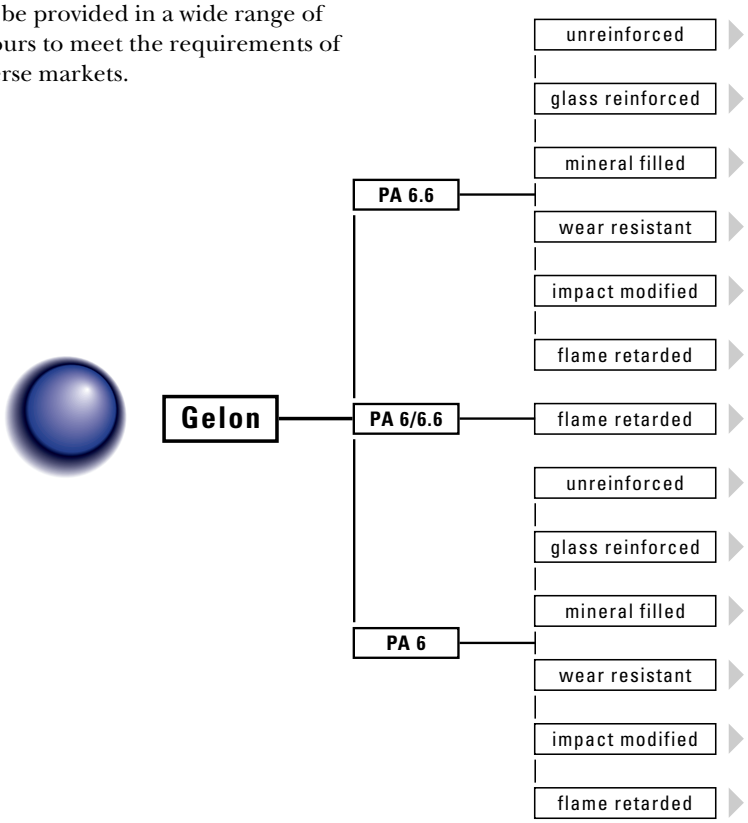
The key properties of Gelon are its:

- Semi-crystalline structure with a high melting point
- Excellent chemical resistance to a wide variety of chemicals and solvents
- Good outdoor performance
- Outstanding mechanical strength
- Good heat resistance
- Very good electrical properties
- Very good processibility
- Wide range of colours available
- Excellent price/performance ratio

The Gelon resin family includes unmodified polyamide 6 (PA 6), polyamide 6,6 (PA 6,6) and copolymer 6,6/6 (PA 6,6/6). These are complemented by modified grades which are produced through compounding with reinforcements, toughener, heat stabilizers or UV-packages.
The Gelon range can be rendered FR without the use of halogen and/or phosphor. It should be noted that GE Plastics in Europe does not manufacture any material containing polybrominated biphenyls (PBBs) or polybrominated diphenylethers (PBDEs).

Gelon polymers can be injection moulded using standard equipment. Talor-made Gelon extrusion grades complete the portfolio for applications such as thermal breaks in window systems. Furthermore, Gelon can be provided in a wide range of colours to meet the requirements of diverse markets.

After their first application life, Gelon resins can be reground and reused as they retain a high residual value.
In many cases they can be recycled into similar applications within the same industry. Alternatively, they can be 'cascaded' down for reuse in less demanding applications. In either case, the recycling of Gelon polymers makes economic and environmental sense.



2

Markets

Automotive

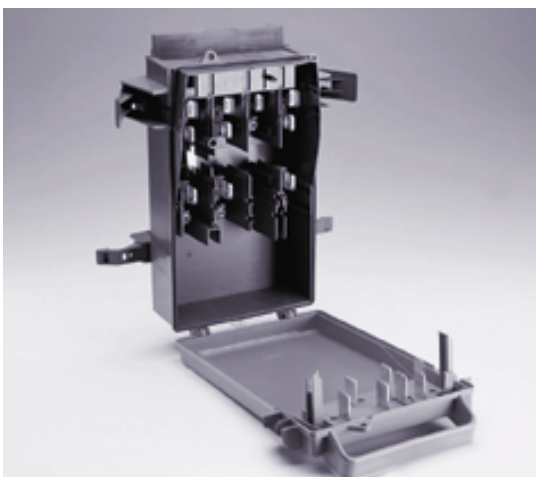
The automotive industry is the largest market for polyamide. Gelon is used in a wide variety of applications. These range from interior dashboard switches, window handles, exterior wheel covers and mirror housings to under the bonnet radiator end tanks and fluid reservoirs.
To all these demanding applications Gelon brings an ideal balance of properties which include:

- Outstanding mechanical strength
- Excellent chemical resistance to automotive fluids
- Good heat resistance
- Excellent price/performance ratio

Electrical

In the electrical industry, flame retarded polyamide grades are widely used for thin wall parts such as connectors, switch housings and circuit breakers. Gelon offers halogen- and/or phosphor- free grades for PA 6 and PA 6,6. Gelon is also used for less demanding applications like electrical enclosures, plugs and cable ties.
To a market where reliability is critically important, Gelon offers superior properties which include:

- Very good electrical properties
- Outstanding self-extinguishing capability
- Semi-crystalline structure with a high melting point
- Very good processibility
- Good heat resistance



Appliances

In the appliances market, Gelon is the ideal choice for housings of electrical parts like power tools and hair dryers. Gelon is also used for handles of refrigerators and suitcases as well as for garden tools.
The particular properties which the material brings to these products include:

- High impact resistance
- Excellent surface appearance
- Outstanding mechanical strength and long-term thermal performance
- Good heat resistance
- Very good electrical properties
- Excellent price/performance ratio

Extrusion

The specially developed Gelon extrusion resins can be readily extruded on conventional equipment. Gelon is mainly used for a wide range of profiles in the building and construction, electrical and lighting industries.
Gelon typically provides a cost-effective material solution to manufacturers' needs, while offering enhanced design freedom. A good example of this is found in GE Plastics' tailor-made Gelon grade for thermal breaks in window systems.
In general Gelon extrusion grades offer:

- Outstanding impact resistance
- High thermal resistance
- Very good processibility
- Excellent surface appearance

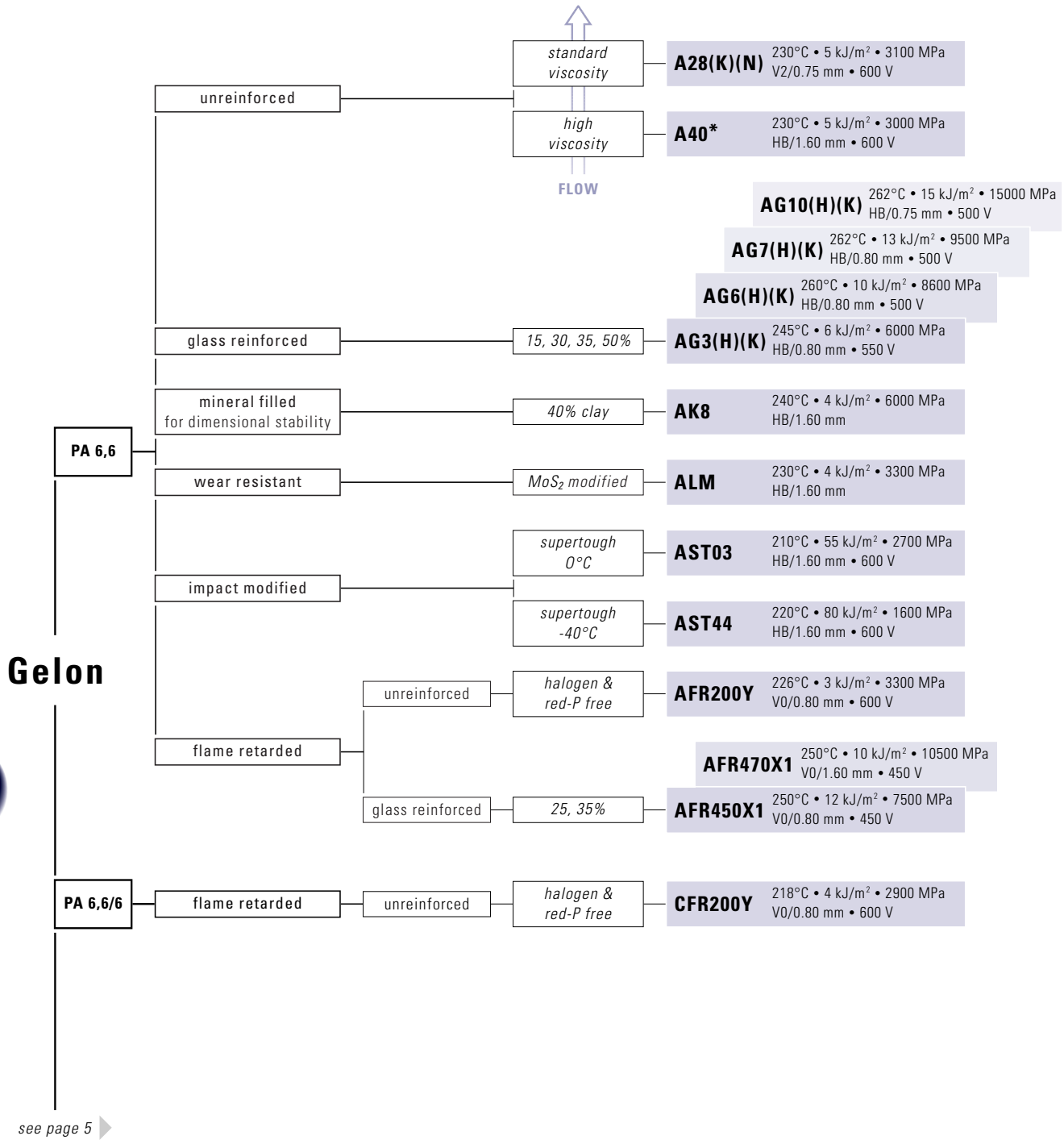
Others

Gelon polyamide is also ideally suited to many other diverse applications which, for example, include:

- Kitchenware (grades in compliance with EN 71 available)
- Railway insulators
- Sports equipment
- Fluid engineering parts such as fittings and pump parts
- Door handles

3

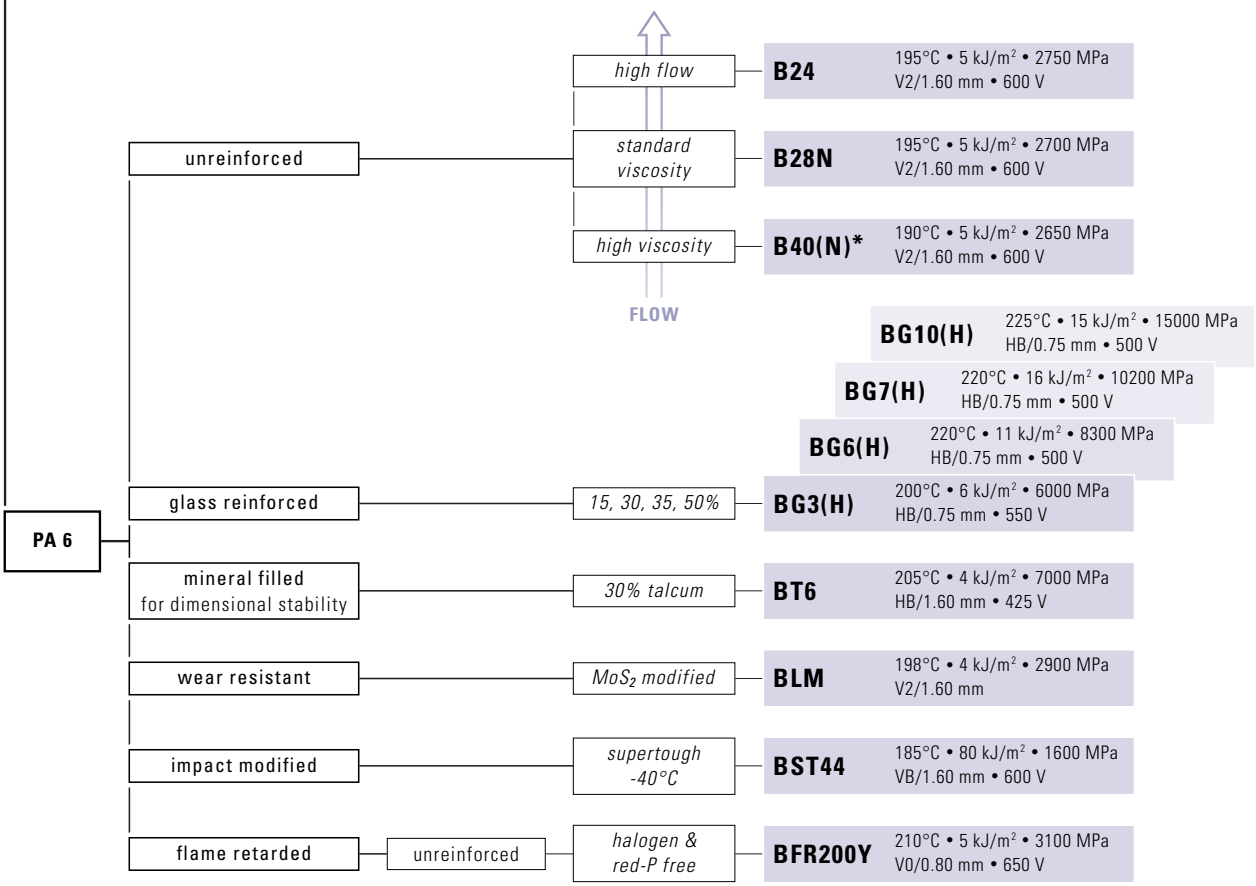
Product Selection



see page 5

see page 4

Gelon



GRADE	Heat • Impact • Modulus Flammability • CTI

Grade:	All are injection moulding grades unless indicated by * also extrusion.
(H), (K)	Stabilized version
(N)	Nucleated version
Heat:	HDT/Be in °C (ISO 75)
Impact:	Izod Notched in kJ/m² (ISO 180/1A)
Modulus:	Flexural in MPa (ISO 178)
Flammability:	Flame class at mm thickness (UL94)
CTI	100 drops value in V (IEC 112/3rd)

Typical Properties Typical values only. Variations within normal tolerances are possible for various colours.			**Unit**	**Test Method** ISO IEC*	 DIN VDE*	 ASTM other*	**Test Specimen** MPTS (multi-purpose test specimen) as defined in ISO 3167. Smaller test specimens may be machined from MPTS. All dimensions in mm.
Mechanical							
Tensile stress	at yield	at 50 mm/min	MPa	527			
	at break	at 5 mm/min	MPa	527			MPTS (150 x 20/10 x 4)
Tensile strain	at break	at 50 mm/min	%	527			
	at break	at 5 mm/min	%	527			MPTS
Tensile modulus		at 1 mm/min	MPa	527			MPTS
Flexural stress	at yield [at break]	at 2 mm/min	MPa	178			80 x 10 x 4
Flexural modulus		at 2 mm/min	MPa	178			80 x 10 x 4
Hardness	Rockwell	R, M or L	scale	2039-2		D785	
Impact							
Izod	notched	at +23°C [-40°C]	kJ/m^2	180-1A			
Charpy	unnotched	at +23°C	kJ/m^2	179			80 x 10 x 4
Thermal							
Vicat B/120	50N (method B)	at 120°C/h	°C	306			110 x 10 x 4
HDT/Ae	edgewise, span 100 mm	at 1.80 MPa	°C	75			
/Be		at 0.45 MPa	°C	75			110 x 10 x 4
Relative Temperature Index	RTI	20 000 h	°C	216*			
Coefficient of Thermal Expansion	CTE	in flow direction	1/°C		53752	D696	]2)
Flammability							
UL94 rating	flame class rating	at mm thickness	class at mm			UL94*	125 x 13, thickness as noted]1)]3)
Limited Oxygen Index	LOI		%	4589		D2863	150/80 x 10 x 4]3)
Glow wire	passed at °C	at mm thickness	°C at mm	695-2-1*			
Hot Wire Ignition	HWI	Performance Level Class	PLC			UL746A*	]1)
High-Current Arc Ignition	HAI	Performance Level Class	PLC			UL746A*	]4)
Electrical							
Comparative Tracking Index	CTI (CTI- M)	50 drops [M: wetting agent]	V	112*		D3638	]5)
Physical							
Density			g/cm^3	1183		D792	
Moisture absorption	24 h	at 23°C, 50% R.H.	%	62		D570	
Water absorption	at saturation	at 23°C, in water	%	62		D570	
Mould shrinkage		in flow direction	%	527		D955	]6)

[1]) *as recognized on UL yellow cards; UL recognition may differ with colour*
[2]) *values may differ with glass fibre orientation*
[3]) *these ratings are not intended to reflect hazards presented by this or other material under actual fire conditions*
[4]) *measured at 3 - 3.2 mm thickness - values may differ for other thicknesses*
[5]) *values may differ with pigmented materials*
[6]) *only typical data for material selection purposes - not to be used for part/tool design; for glass reinforced grades: values may differ with glass fibre orientation*

page 8

PA 6,6

unreinforced		glass reinforced				mineral filled	wear resistant	impact modified	
standard viscosity	high viscosity	15%	30%	35%	50%	40% clay	MoS_2 modified	supertough 0°C	supertough -40°C
A28(K)(N)	**A40**	**AG3(H)(K)**	**AG6(H)(K)**	**AG7(H)(K)**	**AG10(H)(K)**	**AK8**	**ALM**	**AST03**	**AST44**
85	80	–	–	–	–	–	92	65	50
–	–	125	170	200	215	100	–	–	–
50	>60	–	–	–	–	–	30	60	>100
–	–	3.5	3.0	3.0	2.0	6.0	–	–	–
2900	2800	6500	9800	10000	15500	6100	3200	2500	1800
115 (–)	110 (–)	– (175)	– (260)	– (270)	– (305)	n.t.	120 (–)	90 (–)	80 (–)
3100	3000	6000	8600	9500	15000	n.t.	3300	2700	1600
R118	R117	n.t.	L115	L115	L120	L110	R119	R108	R105
5 (3)	5 (3)	6 (n.t.)	10 (8)	13 (11)	15 (13)	4 (n.t.)	4 (2)	55 (35)	80 (60)
>100	>100	55	100	110	140	n.t.	>50	>100	>100
252	252	253	258	260	260	n.t.	252	n.t.	n.t.
90	90	230	255	257	258	170	90	80	80
230	230	245	260	262	262	n.t.	230	210	220
105 [2)]	105 [2)]	130 [2)]	130 [2)]	130 [2)]	130 [2)]	n.t.	n.t.	n.t.	n.t.
$8.0 \cdot 10^{-4}$	$8.0 \cdot 10^{-4}$	n.t.	$3.0 \cdot 10^{-4}$	$3.0 \cdot 10^{-4}$	$1.5 \cdot 10^{-4}$	$2.5 \cdot 10^{-4}$	$8.0 \cdot 10^{-4}$	$3.0 \cdot 10^{-4}$	$3.0 \cdot 10^{-4}$
V2/0.75	HB/1.60 [1)]	HB/0.80 [2)]	HB/0.80 [2)]	HB/0.80 [2)]	HB/0.75 [2)]	n.t.	HB/1.60 [1)]	HB/1.60 [1)]	HB/1.60 [1)]
–	–	–	–	–	–	–	–	–	–
26	26	27	27	27	27	n.t.	26	n.t.	n.t.
n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.
n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.
n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.
600 (600)	600 (600)	550 (450)	500 (400)	500 (375)	500 (350)	n.t. (n.t.)	n.t. (n.t.)	600 (600)	600 (600)
1.14	1.16	1.23	1.36	1.41	1.57	1.46	1.15	1.08	1.07
1.30	1.30	0.80	0.60	0.60	0.49	0.65	1.30	0.80	0.60
8.50	8.50	7.00	4.50	4.50	2.50	n.t.	8.50	6.00	5.50
1.6-2.0	1.6-2.0	0.4-0.8	0.2-0.4	0.15-0.30	0.1-0.25	0.9-1.3	1.6-2.0	1.3-2.0	1.0-1.2

[1)] *UL94 in-house tested*
[2)] *only (H) or (K) versions*

NB : not broken *– : not relevant* *n.t.: not tested*

page 7

PA 6,6 | PA 6,6/6 | PA 6

page 9

Typical Properties

Typical values only.
Not to be used for specification purposes.

				flame retarded		flame retarded	unreinforced			
			unreinforced	glass reinforced		unreinforced				
			halogen & red-P free	25%	35%	halogen & red-P free	high flow	standard viscosity	high viscosity	
			AFR200Y	**AFR450X1**	**AFR470X1**	**CFR200Y**	**B24**	**B28N**	**B40(N)**	
Mechanical		Unit								
Tens. stress	y 50	MPa	65	–	–	–	80	80	75	
	b 5	MPa	–	150	160	80	–	–	–	
Tens. strain	b 50	%	15	–	–	–	60	60	70	
	b 5	%	–	3.0	2.5	5.0	–	–	–	
Tens. modulus		MPa	3000	8000	11000	3300	2900	2900	2800	
Flex. stress	y (b)	MPa	105 (–)	– (215)	– (230)	– (115)	100 (–)	100 (–)	98 (–)	
Flex. modulus		MPa	3300	7500	10500	2900	2750	2700	2650	
Hardness	Rockwell	scale	R118	L108	L107	R109	R120	R120	R120	
Impact										
Izod notch.	23° (-40°) C	kJ/m²	3 (n.t.)	9 (7)	10 (7)	4 (n.t.)	5 (3)	5 (3)	5 (3)	
Charpy unnotch.	23° C	kJ/m²	45	n.t.	n.t.	n.t.	>100	>100	>100	
Thermal										
Vicat B/120		°C	236	255	255	232	215	215	215	
HDT/ Ae 1.80 MPa		°C	88	248	248	67	72	72	70	
/ Be 0.45 Mpa		°C	226	250	250	218	195	195	190	
RTI 20 000 h		°C	105	125	125	n.t.	90	90	90	
CTE flow		1/°C	$8.0 \cdot 10^{-4}$	$2.5 \cdot 10^{-4}$	$2.5 \cdot 10^{-4}$	n.t.	$8.0 \cdot 10^{-4}$	$8.0 \cdot 10^{-4}$	$8.0 \cdot 10^{-4}$	
Flammability										
UL94		class at mm	V0/0.80 [1]	V0/0.80	V0/1.60 [1]	V0/0.80 [1]	V2/1.60 [1]	V2/1.60 [1]	V2/1.60 [1]	
			–	V1/1.60	–	–	–	–	–	
LOI		%	29	28	30	n.t.	23	23	23	
Glow wire		°C at mm	960/2.0	960/2.0	960/2.0	960/2.0	n.t.	n.t.	n.t.	
HWI - PLC		PLC	n.t.	0	n.t.	n.t.	n.t.	n.t.	n.t.	
HAI - PLC		PLC	n.t.	0	n.t.	n.t.	n.t.	n.t.	n.t.	
Electrical										
CTI (CTI-M)		V	600 (550)	450 (400)	450 (450)	600 (600)	600 (600)	600 (600)	600 (600)	
Physical										
Density		g/cm³	1.17	1.36	1.49	1.15	1.14	1.14	1.14	
Moisture abs.	23°C 24 h	%	1.10	0.70	0.60	1.30	2.50	2.50	2.50	
Water abs.	23°C sat.	%	7.50	6.00	4.50	n.t.	10.00	10.00	10.00	
Mould shrink.	flow	%	1.1-1.5	0.2-0.4	0.2-0.3	n.t.	1.1-1.5	1.1-1.5	1.1-1.5	

[1]) *UL94 in-house tested*
[2]) *only (H) or (K) versions*

NB : not broken – : not relevant n.t.: not tested

page 8

PA 6

glass reinforced | mineral filled | wear resistant | impact modified | flame retarded | unreinforced

15% | 30% | 35% | 50% | 30% talcum | MoS_2 modified | supertough -40°C | halogen & red-P free

Typical Properties

Typical values only.
Not to be used for specification purposes.

		BG3(H)	BG6(H)	BG7(H)	BG10(H)	BT6	BLM	BST44	BFR200Y
Mechanical									
Tens. stress	y 50	–	–	–	–	–	80	45	–
	b 5	150	170	190	210	80	–	–	80
Tens. strain	b 50	–	–	–	–	–	50	>100	–
	b 5	3.5	3.0	3.0	2.0	2.0	–	–	2.0
Tens. modulus		6000	9500	11000	16000	7500	3000	1800	3400
Flex. stress	y (b)	– (175)	– (240)	– (280)	– (300)	– (125)	105 (–)	60 (–)	– (120)
Flex. modulus		5600	8300	10200	15000	7000	2900	1600	3100
Hardness	Rockwell	n.t.	L112	n.t.	L115	L105	R125	R115	R107
Impact									
Izod notch.	23° (-40°) C	6 (n.t.)	11 (9)	16 (n.t)	15 (13)	4 (n.t.)	4 (2)	80 (12)	5 (n.t.)
Charpy unnotch.	23° C	60	110	150	140	50	>100	>100	50
Thermal									
Vicat B/120		206	215	220	220	222	215	210	215
HDT/ Ae 1.80 MPa		190	210	215	215	165	75	73	65
/ Be 0.45 Mpa		200	220	220	225	205	198	n.t.	210
RTI 20 000 h		130 [2]	130 [2]	130 [2]	130 [2]	105	90	n.t.	n.t.
CTE flow		n.t.	$3.0 \cdot 10^{-4}$	n.t.	$1.5 \cdot 10^{-4}$	$4.5 \cdot 10^{-4}$	$8.0 \cdot 10^{-4}$	$5.0 \cdot 10^{-4}$	$3.5 \cdot 10^{-4}$
Flammability									
UL94		HB/0.75 [2]	HB/0.75 [2]	HB/0.75 [2]	HB/0.75 [2]	HB/1.60 [1]	V2/1.60 [1]	n.t.	V0/0.80 [1]
		–	–	–	–	–	–	–	–
LOI		24	24	24	25	24	23	n.t.	29
Glow wire		n.t.	n.t.	n.t.	n.t.	650/2.0	n.t	n.t.	960/2.0
HWI - PLC		n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.
HAI - PLC		n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.
Electrical									
CTI (CTI-M)		550 (450)	500 (375)	500 (375)	500 (350)	425 (350)	n.t. (n.t.)	600 (600)	650 (650)
Physical									
Density		1.23	1.36	1.41	1.56	1.37	1.15	1.08	1.18
Moisture abs.	23°C 24 h	1.25	1.00	0.95	0.75	1.00	2.00	1.00	1.80
Water abs.	23°C sat.	8.00	6.50	6.20	4.50	6.50	9.00	n.t.	9.00
Mould shrink.	flow	0.45-0.85	0.2-0.4	0.15-0.35	0.1-0.2	n.t.	1.0-1.3	n.t.	0.8-1.2

[1]) *UL94 in-house tested*
[2]) *only (H) or (K) versions*

NB : not broken *– : not relevant* *n.t.: not tested*

4

Processing

Gelon high quality polyamide resins can be easily processed using standard injection moulding or extrusion equipment.

As with other semi-crystalline resins, once molten, the melt viscosity of Gelon injection moulding resins is sufficiently low to allow for long flow lengths through thin wall sections and/or complicated geometries. Gelon's rate of crystallization, as well as the degree of crystallinity in the final part, can, between certain limits, be influenced by varying the mould temperature.

In applications where a minimum level of melt strength is required, as for instance in profile extrusion, Gelon's high viscosity grades are recommended.

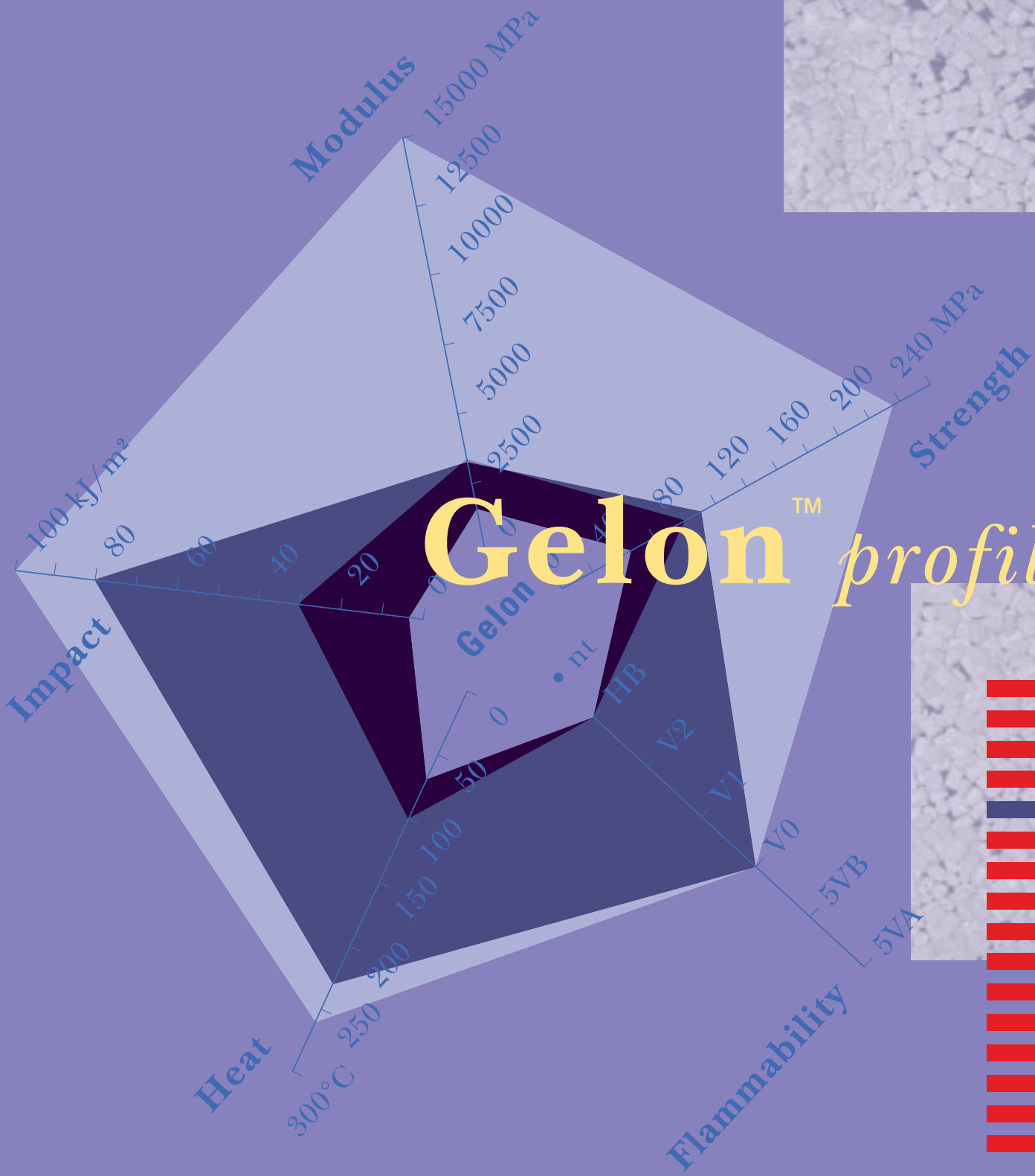
Polyamides are characterised by their moisture sensitivity.
Firstly, polyamides can absorb up to 10% of their own weight in water, depending on the type of resin or compound and on the conditions.
Secondly, being a polycondensate, polyamide resins are susceptible to hydrolytic polymer chain scission as the result of presence of water at elevated temperatures.
While processing Gelon it is therefore recommended to maintain the moisture content below 0.2% in order to prevent hydrolysis as well as surface defects such as splay or blisters.
Gelon high quality polyamide resins are delivered predried in sealed packaging. No predrying is required if processed directly upon opening. However predrying may be necessary given prolonged residence in open equipment or prolonged storage even in closed packaging.

Purging of the barrel may be required when changing material or colour. For this purpose, high molecular weight polypropylene (PP) or high density polyethylene (HDPE) grades can be used. Glass fibre reinforced Gelon grades are also very effective cleaning agents as the result of their slightly abrasive action.

For specific guidelines and recommendations with respect to processing temperatures and predrying conditions, readers are asked to refer to the relevant Gelon technical datasheet.
For health, safety and/or environmental concerns relative to processing of Gelon resins readers are asked to consult the appropriate material safety data sheet (MSDS).

GE Plastics

Gelon™ profile



GE Plastics in Europe

European Headquarters
General Electric Plastics B.V.
1 Plasticslaan, PO Box 117
NL - 4600 AC Bergen op Zoom
The Netherlands
Tel. (31) (164) 29 29 11
Fax (31) (164) 29 29 40

Headquarters Sales Region
General Electric Plastics B.V.
Gagelboslaan 4
NL - 4623 AD Bergen op Zoom
The Netherlands
Tel. (31) (164) 29 23 91
Fax (31) (164) 29 17 25

Benelux Sales Region
General Electric Plastics B.V.
Gagelboslaan 4
NL - 4623 AD Bergen op Zoom
The Netherlands
Tel. (31) (164) 29 11 92
Fax (31) (164) 29 17 25

United Kingdom
GE Plastics Limited
Old Hall Road
Sale
Cheshire M33 2HG United Kingdom
Tel. (44) (161) 905 50 00
Fax (44) (161) 905 51 19

Germany
General Electric Plastics GmbH
Eisenstraße 5
D - 65428 Rüsselsheim Germany
Tel. (49) (6142) 6010
Fax (49) (6142) 65746

France
General Electric Plastics France S.à.R.L.
Z.I. St. Guénault B.P. 67
F - 91002 Evry-Cedex France
Tel. (33) (1) 60 79 69 00
Fax (33) (1) 60 77 56 53

Italy
General Electric Plastics Italia S.p.A.
Viale Brianza, 181
I - 20092 Cinisello Balsamo (Milano) Italy
Tel. (39) (02) 61 83 41
Fax (39) (02) 61 83 42 11

Russia
General Electric International A/O
Kosmodamianskaia Nab, 52
Building 1
113054 Moscow Russia
Tel. (7) (095) 935 7312
Fax (7) (095) 935 7317

Spain
General Electric Plastics Ibérica S.A
Avenida Diagonal, 652-656
Edificio D. Planta 3
08034 Barcelona Spain
Tel. (34) (93) 252 16 00
Fax (34) (93) 280 26 19

Sweden
GE Plastics Limited
Box 1242, Skeppsbron 44
S-11182 Stockholm Sweden
Tel. (46) (8) 402 40 24
Fax (46) (8) 723 12 92

Turkey
GE Plastics Turkey
Is Bankasi Bloklari
Cemil Topuzlu Caddesi
A Blok, Daire 18
Feneryolu
ul Turkey
0) (216) 386 7104
0) (216) 386 5812

GE Plastics in India

GE Plastics India Ltd.
405-B, Sector 20
Udyog Vihar Phase - III
Gurgaon, Haryana - 122 016, India
Tel. (91) 124 341 801 to 806
Fax (91) 124 341 817 or 815

GE Plastics in South Africa

GE Plastics South Africa
General Electric South Africa (Pty) Ltd.
15th floor Sandton Office Tower
Sandton 2146
Johannesburg, South Africa
Tel. (27) 11 784 2108
Fax (27) 11 784 2216

GE Plastics in the Americas

Worldwide Headquarters
United States
GE Plastics
1 Plastics Avenue
Pittsfield, MA 01201
USA
Tel. (1) (413) 448 7110
Fax (1) (413) 448 7493

Canada
GE Plastics Canada Ltd.
2300 Meadowvale Boulevard
Mississauga, Ontario L5N 5P9
Canada
Tel. (1) (905) 858 5774
Fax (1) (905) 858 5798

Mexico
GE Plastics - Mexico S.A. de C.V.
Av. Prolongacion Reforma #490, 4o. piso
Colonia Santa Fe
01207 Mexico, D.F.
Tel. (11) 525 257 6060
Fax (11) 525 257 6070

Brazil
GE Plastics South America S.A.
Av. Nações Unidas, 12995 - 20° andar -
Cep 04578.000
São Paulo - SP
Brazil
Tel. (55) 11 5505 2800
Fax (55) 11 5505 1757

GE Plastics in the Pacific

Pacific Headquarters
GE Plastics Pacific Pte. Ltd.
240 Tanjong Pagar Road
GE Tower #09-00
Singapore 0208
Tel. (65) 326 3301
Fax (65) 326 3303/(65) 326 3290

Australia
GE Plastics Australia
175 Hammond Road
Dandenong, Victoria 3175
Australia
Tel. (61) 3 794 4201
Fax (61) 3 794 8563

China
GE Plastics China
Beijing, 3rd floor
CITIC Bldg. No.19
Jian Guo Men Wai Avenue
Beijing 100004
China
Tel. (86) (21) 270 6789
Fax (86) (1) 512 7345

Hong Kong
GE Plastics Hong Kong Ltd.
Room 1088 - Tower 1
The Gateway, Tshimshatsui
Kowloon
Hong Kong
Tel. (852) 2629 0827
Fax (852) 2629 0800

Japan
GE Plastics Japan Ltd.
Nihombashi Hamacho Park Building
2-35-4, Nihombashi-Hamacho
Chuo-ku, Tokyo 103
Japan
Tel. (81) 3 5695 4888
Fax (81) 3 5695 4859

Korea
GE Plastics Korea Co. Ltd.
231-8 Nonhyun-Dong
Kangnam-Ku
Seoul 135-010
Republic of Korea
Tel. (82) 2 510 6250/1
Fax (82) 2 510 66 66/7

Singapore
GE Plastics Singapore Pte Ltd.
c/o 23 Benoi Road
Singapore 2262
Tel. 65 846 3290
Fax 65 861 3063

Taiwan
GE Plastics Taiwan
9/F 37 Min Chuan East Road Sec 3
Taipei 10462
Taiwan, Rep. of China
Tel. (886) 2 509 2124/6
Fax (886) 2 509 1625

Thailand
GE Plastics Thailand
21st Floor
Thaniya Plaza Building
52 Silom Road
Bangkok 10500
Thailand
Tel. (66) (2) 231 2323
Fax (66) (2) 231 2322

Gelon Eng/5M/0498