

## in Halogen-Free FR Compounds

**LATAMID 66 H2 G/25-VOHF1**  
**LATAMID 6 H2 G/30-VOHF1**  
**KELON B FR H2 CEG/300-VOHF1**

LATI has always been at the forefront in dealing with problems coming from different market sectors and in suggesting the most cost-effective solutions.

In the early 60's LATI pioneered the production and the commercialisation of a broad range of glass-fibre reinforced thermoplastics and in the '70s was one of the very first offering flame-retardant compounds.

LATI places great importance on resolving environmental problems, and in following the latest trends in Halogen-Free flame retardant systems, a broadened range of innovative products has been developed. Such new grades, which provide exceptional property combinations for a host of applications, are available in a wide range of colours.

In addition, they fulfil the recent modifications made to the Standard IEC 60335-1 (4<sup>th</sup> Edition) for unattended electrical devices under the most critical fire risk conditions, which prescribe the following requirements: GWFI  $\geq$  850°C, GWIT  $\geq$  775°C, Heat Resistance (Ball Indentation Test)  $\geq$  125°C and Resistance to Tracking (CTI)  $\geq$  250 V.

LATI is willing to share with you its expertise in this field, and its T.S. and R&D Teams are at your complete disposal to analyse your requirements and collaborate on project developments.

### Key benefits:

- Halogen & Red-Phosphorus free;
- Low density;
- Good mechanical properties;
- GWIT  $>$  775°C;
- CTI 600 V;
- UL94-V0;
- Wide color range.



**LATAMID 66 H2 G/25-V0HF1 NAT.:0187**

PA 66, heat stabilised, glass fibres, UL94 V-0, halogens and red-phosphorus free

**LATAMID 6 H2 G/30-V0HF1 NAT.:0187**

PA 6, heat stabilised, glass fibres, UL94 V-0, halogens and red-phosphorus free

**KELON B FR H2 CEG/300-V0HF1 NAT.:0187**

PA 6, heat stabilised, mixed fillers, UL94 V-0, halogens and red-phosphorus free



PROPERTIES (typical values)		Standards	Units (SI)	LATAMID 66 H2 G/25-V0HF1	LATAMID 6 H2 G/30-V0HF1	KELON B FR H2 CEG/300-V0HF1
<b>Physical</b>						
Density	23°C	ISO 1183	g/cm <sup>3</sup>	1.38	1.40	1.40
Linear shrinkage during moulding (plaque 120 x 80 x 3.5 mm)	along flow	LATI	%	0.2 ÷ 0.5	0.2 ÷ 0.5	0.5 ÷ 0.7
	across flow			0.8 ÷ 1.0	0.7 ÷ 0.9	0.7 ÷ 0.9
<b>Mechanical</b>						
IZOD - Impact strength (notched) (specimen 63.5 x 12.7 x 3.2 mm)	23°C	ASTM D256-A	J/m	95	110	45
CHARPY Impact strength (unnotched) (specimen 80 x 10 x 4 mm)	23°C	ISO 179-1eU	kJ/m <sup>2</sup>	70	72	30
CHARPY Impact strength (notched) (specimen 80 x 10 x 4 mm)	23°C	ISO 179-1eU	kJ/m <sup>2</sup>	9.5	11	4
Tensile Modulus	speed 1 mm/min	ISO 527 (1)	Mpa	9000	9600	8000
Tensile strength at break	speed 5 mm/min	ISO 527 (1)	Mpa	145	150	70
Tensile elongation at break	speed 5 mm/min	ISO 527 (1)	%	3.2	3.3	2.5
<b>Thermal</b>						
VICAT - Softening point (heating rate 50°C/h)	49 N	ISO 306	°C	242	215	210
HDT - Heat Distortion Temperature	0.45 Mpa	ISO 75	°C	255	222	212
	1.82 Mpa			237	211	185
<b>Electrical</b>						
CTI - Comparative Tracking Index	"A" solution (without surfactant)	IEC 112	V	600	600	600
<b>Flammability</b>						
L.O.I. - Oxygen Index		ASTM D 2683	%	33	32	32
Flammability Rating	@ 3.00 mm thickness	UL-94	Class	V-0	V-0	V-0
	@ 1.50 mm thickness			V-0	V-0	V-0
	@ 0.75 mm thickness			V-0	V-0	V-0
GWFI Glow-Wire Flammability Index	@ 1 mm thickness	IEC 695-2-12	°C	850	960	960
	@ 2 mm thickness			960	960	960
GWIT Glow-Wire Ignition Temperature	@ 1 mm thickness	IEC 695-2-13	°C	800	800	800
	@ 2 mm thickness			825	800	800

This document contains information based on average values as obtained from the results of laboratory tests and observations made on our materials. Tested materials were injection moulded, used in their natural colour, and conditioned in compliance with Standard ASTM D 618, procedure A (40 h - 23°C - 50%R.H.). These data refer to our best technical and scientific knowledge at the moment of testing and cannot be used as a basis for the development of applications.

For a better assessment of the materials, you are kindly requested to contact our technical or commercial offices, which are at your disposal and will supply detailed information on the most suitable characteristics for the intended use. With reference to DPR n. 224 dated May 24, 1988 issued in accordance with EC Guide-lines 85/374, LATI Industria Termoplastici S.p.A. declines all responsibility arising from an improper use of the products described in this document.