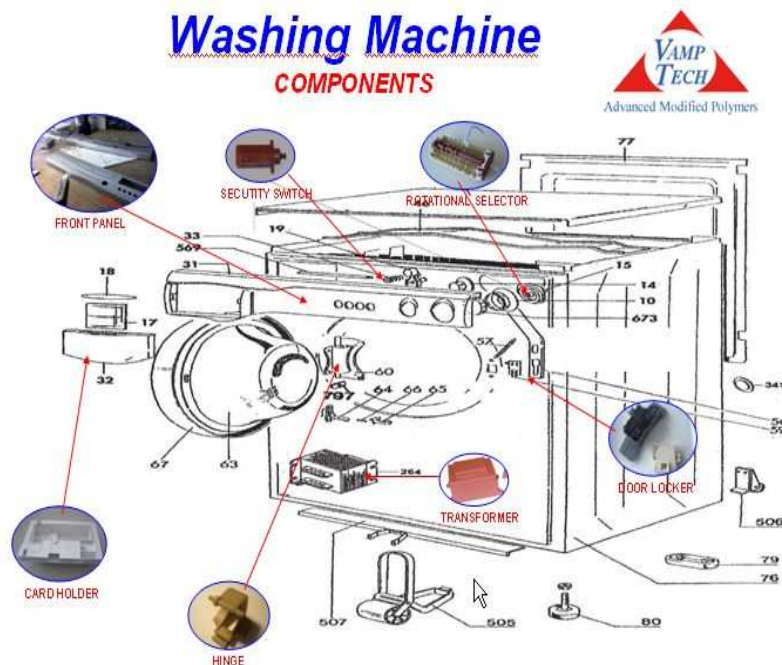


HOUSEHOLD APPLIANCES:

Flame Retarded Compounds certified for the Global Market

Vamp Tech, compounder specialized in a wide range of Flame Retarded products including PP, PA6, PA66, PBT, PET, PPA, PPS, PEEK, PS, ABS, PC, PC/ABS, PC/PBT, PSU, has selected two high performances products for household appliances, which have recently obtained further International homologations, i.e. the UL certification, including RTI (operating temperature in continuous) and the VDE Certification related to the EN 60335-4th Ed. Norm. Therefore, the producers of household appliances and electrical components can trade their own products based on these compounds both on the US/ Asian market (which refer to the UL norm) and in Europe (where the EN 60335 norm is mandatory).



The compounds endowed with above mentioned certifications are **VAMPAMID 66 0023 V0 H GW** (PA66, unfilled, UL94-V0 with halogens, No Flame) and **VAMPAMID 66 2526 V0 NAT 40MQ** (PA66, 25% glass fibre, UL94-V0 with halogens, No Flame).


The most common applications of these products include **different types of connectors, rotational selectors, washing machine door lockers, transformers, switches, micro-switches, various terminal boards, manostats, bobbins for valves, washing machine/dish-washer pumps, plugs/sockets, thermostats, capacitors and card holders.**

VDE	
Institute	Detail CertifiedProductsWebPart
Online Service	Approval no.: 40025912
VDE approved products	VDE-Reg-no.: 842
Online Search	Product: Electrical insulating materials
Unlawful use	Productgroup: Insulation material testing
	Company: VAMP TECH SPA Via delle industrie 10 / 12 I-20040 BUSNAGO MI
	Mark: VDE Reg.- Nr.
	Type: VAMPAMID 66 0023 V0 H GW
	Technical data: Colours: uncoloured and black Glow-wire-flammability-index (GWFI): 960/0,75 960/1,5 960/3,0 Glow-wire-ignition- temperature (GWIT): 775/0,75 775/1,5 775/3,0 Temperature of the ball pressure test: 165° C Comperative tracking index (CTI): 250 V
	Type: VAMPAMID 66 2526 V0 40 MQ
	Technical data: Colours: all colours Glow-wire-flammability-index (GWFI): 960/0,75 960/1,5 960/3,0 Glow-wire-ignition- temperature (GWIT): 775/0,75 775/1,5 775/3,0 Temperature of the ball pressure test: 165° C Comperative tracking index (CTI): 325 V all colours 400 V uncoloured and white

The VDE certificate of conformity to the EN60335 Norm of above mentioned VAMPAMID


In particular **VAMPAMID 66 0023 V0 H GW** has to be preferred for those components requiring elasticity and hinge effect due to following performances:

- **UL 94-V0 up to 0,4 mm** (very important for connectors or components with hinge effects which typically have a thickness of 0,4 mm)
- **Electrical RTI 130°C** (operating temperature in continuous)
- **EN 60335-4th Ed. Certification by VDE**
- **NO FLAME** behaviour on moulded pieces in the GWT Test at 750°C
- **CTI ≥ 325V**
- Good electrical performances also with water and surfactant agents (Spray or Arc Tracking test)
- Excellent thermal stability in the moulding also with **hot runners**
- Excellent **hinge effect**

Component - Plastics					E140692		
VAMP-TECH SPA							
VIALE DELLE INDUSTRIE 10/12, BUSHAGO MI 20040 IT							
VAMPAMID 66 0023 V0(e) H GW(f)							
Polyamide 66 (PA66), furnished as pellets							
Color	Min Thk (mm)	Flame Class	HWM	HAI	RTI Elec	RTI Imp	RTI Str
ALL	0.40	V-0	4	0	125	65	125
	0.8	V-0	3	0	130	65	130
	1.5	V-0	1	0	130	65	130
	3.0	V-0	0	0	130	65	130
Comparative Tracking Index (CTI): 2				Dimensional Stability (%): -			
High-Voltage Arc Tracking Rate (HVTR): 3				High Volt, Low Current Arc Resis (D495): 6			
Dielectric Strength (kV/mm): -				Volume Resistivity (10 ^x ohm-cm): -			
(e) - Marking consisting of a generic indication of color followed by an optional alphanumeric code indicating color shade							
(f) - Indicating optional marking consisting of an alphanumeric code referring to manufacturing process information							
ANSI/UL 94 small-scale test data does not pertain to building materials, furnishings and related contents. ANSI/UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.							
Report Date: 2007-04-26		Underwriters Laboratories Inc®				C  US	
Last Revised: 2011-04-12		UL Yellow Card of VAMPAMID 66 0023 V0 H GW					

Vice versa **VAMPAMID 66 2526 V0 40 MQ** has to be privileged for those components requiring stiffness and dimensional stability. This grade offers following performances:

- **UL 94-V0 up to 0,8 mm**
- **Electrical RTI 140°C** (operating temperature in continuous)
- **EN 60335-4th Ed Certification by VDE**
- **NO FLAME** behaviour on moulded pieces during the GWT Test at 750°C
- **CTI ≥ 400V**
- Excellent thermal stability in the moulding also with **hot runners**
- Excellent **dimensional stability** also with high temperatures (HDT ≥ 230°C)

Component - Plastics					E140692		
VAMP-TECH SPA							
VIALE DELLE INDUSTRIE 10/12, BUSHAGO MI 20040 IT							
VAMPAMID 66 2526 V0(e)(f)							
Polyamide 66 (PA66), furnished as pellets							
Color	Min Thk (mm)	Flame Class	HWM	HAI	RTI Elec	RTI Imp	RTI Str
ALL	0.8	V-0	0	0	140	105	130
	1.5	V-0	0	0	140	120	130
	1.6	V-0, 5VA	0	0	140	120	130
	3.0	V-0, 5VA	0	0	140	120	130
Comparative Tracking Index (CTI): 1				Dimensional Stability (%): -			
High-Voltage Arc Tracking Rate (HVTR): 1				High Volt, Low Current Arc Resis (D495): 6			
Dielectric Strength (kV/mm): -				Volume Resistivity (10 ^x ohm-cm): -			
(e) - Marking consisting of a generic indication of color followed by an optional alphanumeric code indicating color shade							
(f) - Indicating optional marking consisting of an alphanumeric code referring to manufacturing process information							
ANSI/UL 94 small-scale test data does not pertain to building materials, furnishings and related contents. ANSI/UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.							
Report Date: 1992-01-10		Underwriters Laboratories Inc®				C  US	
Last Revised: 2010-06-14		UL Yellow Card of VAMPAMID 66 2526 V0 40MQ					

Thanks to these two products, VAMP-TECH strengthens its leadership in the FR compound market, thus confirming its dedication to develop High Performance Compounds such as **VAMPAMID HT (Flame Retarded compound based on PPA)** for electrical applications in extreme temperature conditions and **VAMPSTAT (Flame Retarded electrically dissipative compound)** for application in potentially explosive environments and subject to the ATEX directive.