

Stobicast[®] L&M

Polyurethane Potting Compounds
for Electronics



STOBICAST® L&M

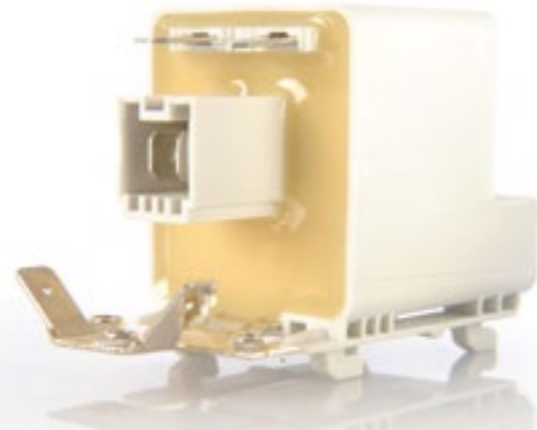
Polyurethane Potting Compounds for Electronics

Stobicast® L&M polyurethane potting compounds are a widely used insulation material for the industrial production of electronics. They are suitable for a broad range of applications such as transformers, capacitors, electromagnetic interference filters, circuit boards, sensors, cable couplers, LEDs and many other products.

The variety of applications and the global chain of production of these items require compliance with various international norms and approvals – Stobicast® polyurethane potting compounds do meet them all. Additionally, they allow for comprehensive customization of many different physical parameters, including, but not limited to, gel time, pot life, colored and transparent versions, heat conductivity, elasticity under cold temperatures as well as adhesion and elongation break. All flame retardant grades are halogen and antimony free.

Stobicast® polyurethane potting compounds meet the following norms and standards:

- UL 94: V-0 (1.3 mm), V-1, V-2 and HB (flammability characteristics)
- EN 45545 and NF F 101/102: I3/F1 (fire test for railway components)
- IEC 60695: GWFI, GWIT (glow wire test)
- UL 746 B: RTI 130° C (heat resistance)
- UL 1446: Electrical insulation systems: Classes F & B
- UL 810: Capacitors
- UL 1283: Electromagnetic interference filters
- DIN 61558: Transformers
- IEC 60335: Household appliances standard
- VDE 0291: Cable fittings
- IEC 335-1 (ball pressure test)
- RoHS (hazardous substances)
- WEEE (waste guideline)
- TLV (scrap vehicle guideline)



STOCKMEIER URETHANES

A leader in technical service, development and quality

Our Stobicast® products provide you with everything you need for your production.

Consultation

We provide you individual and personal service:

- Together with you, we analyze all requirements in your production environment to select the most suitable products.
- If requested, we review your processing and develop suggestions for improvements.
- With our expertise, we can support you during your product launch in areas such as product properties, casting equipment, processing parameters, cycle times, productivity, and many more. All is possible while maintaining the highest standards in application technology and safety.
- We can assist you every step of the way during production start-up and test runs.
- Take advantage of our many years of experience in this field for all aspects of your work.

Development

Customized solutions are standard with Stobicast®:

- Our development cycles are short and offer a clear advantage in your industry, where laws and regulations are continuously changing.
- In our fully equipped laboratory, we test new developments for you according to all relevant standards.
- All of our development work takes REACH and RoHS requirements into consideration to provide you long-term production lifecycles for new formulations.
- We offer you a quick turnaround on customized samples and documentation.

Production

Attention to detail is our strength, particularly in production:

- Customer focused we concentrate to individuality of your needs, rather than ours, making all solutions possible on manufacturing.
- Individuality of the customer need means a tailor made to order basis giving the longest possible shelf life.
- Our focus to production consistency through high levels of automation provides superior quality.
- Our sites concentrate on getting the lowest possible cost versus highest possible performance investing in bulk storage and handling.
- We ensure fast delivery through our global network of warehouses and state-of-the-art inventory control system.
- Constant investment in both equipment and automation for the future needs of our customers means we stay in tune with our customers growth.

Quality

Quality comprises many elements for us:

- Benefit from the quality of our employees. Both highly qualified and strongly motivated, they are the key to excellence in products and support.
- Service quality means that we are with you all the way, from the first idea to the finishing touch. We treat your product as though it was ours. That is what we understand as customer service.
- For us, supplier quality means: supplying you with prompt and reliability under all circumstances. That is why we are regularly rated a grade A-supplier.
- Every batch we produce is given the same level of quality. We test each batch and we control and retain records longer than the shelf life of the material.
- Our ISO 9001 certified production sites worldwide guarantee transparency and continuous improvement of our processes.

Features and Facts



	Electronics, Sensor Technology and Automotive					
	L 806	L 637	L 798	L 622	L 771	L 781
Shore Hardness	A 10	A 33	A 50	A 55	A 80	A 87
Mixing ratio parts per weight	100 : 20	100 : 12	100 : 20	100 : 100	100 : 24	100 : 17
Viscosity (mixed) 25 °C, [mPa-s]	1500	2000	900	2200	600	800
Moulding density [g/cm³]	1.33	0.96	1.34	1.12	1.26	1.42
Flexural strength [N/mm²]	-	-	-	-	-	-
Tensile strength [N/mm²]	0.5	1	1.5	2.3	3	5
Elongation at break [%]	>300	130	135	164	68	100
Glass transition T _g [°C]	-55	-70	-25	-28	-13	0
Insulation class	E	B	E	E	B	B
Thermal conductivity [W/m-K]	0.3	0.25	0.5	0.25	0.4	0.7
Flame class UL 94	V-0	HB	V-2	HB	-	V-0
Glow wire resistance GWIT [°C]	550	550	550	550	550	850
Water absorption 20 °C / 24 h, [%]	0.11	0.11	0.30	0.12	0.10	0.25
Dielectric strength [kV/mm]	22	32	20	32	32	24
Surface resistance [Ω]	10 ¹²	10 ¹³	10 ¹²	10 ¹³	10 ¹³	10 ¹⁴
Remarkable features	very soft	cold flexible	soft	soft, good adhesion	very good flow	RTI 130

	Transformers, Capacitors and Motors						
	L 761	L 793	L 780	L 792	L 807	L 808	M 598
	A 65	D 65	D 65	D 65	D 70	D 88	D 85
	100 : 20	100 : 20	100 : 20	100 : 15	100 : 10	100 : 33	100 : 40
	1100	900	900	1500	3500	2000	1800
	1.36	1.51	1.50	1.64	1.82	1.55	1.44
	-	5	25	7	7	100	90
	3	6	14	3	9	132	70
	105	60	15	200	27	1.1	2
	-7	20	40	20	25	100	90
	B	B	B	B	B	B	B
	0.4	0.65	0.7	0.91	1.6	0.6	0.6
	-	V-0	V-0	V-0	V-0	V-0	V-0
	550	850	850	850	850	850	850
	0.28	0.13	0.12	0.11	0.13	0.10	0.11
	28	28	30	28	28	28	36
	10 ¹⁴	10 ¹⁴	10 ¹⁴	10 ¹⁴	10 ¹³	10 ¹⁵	10 ¹⁵
	low cost system	V-0 @ 1.3 mm	RTI 130	HL3 acc. to EN 45545	high thermal conductivity	very low expansion rate	

This bulletin is a technical overview based on controlled conditions and/or lab work. The manufacturer makes no warranty of merchantability or of fitness for a particular purpose. This is for general informational purposes only and should not be construed as advice on specific product usage. For a more detailed technical description of our systems, please refer to the corresponding data sheets. User must test products for fitness

of use. This analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Unless otherwise agreed, all products are sold to the terms of our standard conditions of sale which are available upon request. The buyer assumes all liability for incorrect or illegal use of this product.

The above potting compounds are representative of the Stobicast® product family and are for industrial use only. A variety of colors are available upon request. Gel and processing times are customizable per customer's request. Requirements for REACH, RoHS, WEEE, and TLV are fulfilled with all products.

STOCKMEIER URETHANES

The Smart Solution.

Polyurethane castings and resins are just one of the many products we create at STOCKMEIER Urethanes. As a specialist within the STOCKMEIER Group, an organization rich in tradition, we have been developing and producing polyurethane systems for industrial and sports applications since 1991.

In our own development laboratories, we find solutions that meet your requirements. As we have locations in Germany, France, the United Kingdom and the USA, we can offer you not only consulting and development, but we can also deliver the right product directly to you.

With our comprehensive service from initial contact combined with the most modern production and distribution technology and certified quality, we convince our customers to become our long-term partners. Our customers' trust combined with the strength backed by the family-owned and operated STOCKMEIER Group, allows us to offer individual solutions which perfectly meet your project requirements – simply intelligent solutions from STOCKMEIER Urethanes.



Delivering Urethane Solutions Worldwide
www.stockmeier-urethanes.com