

Material Selection Questionnaire

Company: _____ Address: _____

Contact person: _____

Telephone: _____

E-mail: _____

Please complete this form and send it to our technical consultants:
 Fax: 0 70 32 / 8 19 - 8295
 E-mail: techservice.shapes@de.ensinger-online.com

1. Please describe the principal function of your application:

2. Is your application a structural/load bearing component?	yes	no
3. Is your application an electrically insulating component?	yes	no

4. Part designation:

5. Industry sector:

6. Material used at present: _____

7. Why do you wish to change to a new material? What problems do you have with your present material?

8. Max. temperature in continuous use	=	°C
period (h/days/months/years)	=	

9. Maximum service temperature short term	=	°C
period (min/h)	=	

10. Physical loadings/forces	=	N
stresses	=	MPa

11. Duration of loadings (h/days/months/years)	=	
	static	dynamic
Permissible elongation/compression	=	%

12. Type of part	finished part, machined	finished part, injection moulded	profile, extruded
Semi-finished product, dimensions:			

13. Are material certificates of specifications required (e.g. FDA, NSF, EU, USP, UL94)?	yes	no
Which?		

14. Ambient conditions		
Is the dimensional stability of the part important under exposure to moisture or heat?	yes	no
Smallest required tolerance	=	mm
Does your product operate in a humid atmosphere or in water?	yes	no
Relative humidity content	=	%
Is it necessary for some of the following factors to be taken into account?		
Chemicals (oil, grease, petrol, diesel fuel, acids, alkalis, solvents and cleaning agents or others)?		
	yes	no

Which? Chemical designation:

Concentration (by weight)	=	%
Service temperature	=	°C
Exposure time (h/days/months/years)	=	
Exposure to wheatering?	yes	no
UV radiation?	yes	no
Powerful radiation (gamma-, X-rays etc.)	yes	no
Are special ambient conditions to be taken into account?	yes	no

Which?

Clean room requirement for medical, food, biological or pharmaceutical application ?

	yes	no
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Clean room requirement for electronics and nuclear engineering?	yes	no
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15. Electrical requirements

Please tick if your component is an

electric insulator

electric conductor

electrostatic dissipator

If your component is an electrical insulator, conductor or electrostatic dissipator, please answer the following questions:

Insulation/volume resistance	=	Ohm*cm
Surface resistance	=	Ohm
Dielectric strength	=	kV/mm
Dielectric loss factor (tan Delta)	=	
at what frequency?	=	kHz
Dielectric coefficient (Epsilon _r)	=	
Tracking resistance	stage:	
Arc resistance	stage:	
High frequency use	Microwave use	

Do you prefer one of the following plastics for your application?

TECAFORM AH/AD	POM C and H	TECAFLON PTFE	PTFE
TECAMID 6	PA 6	TECASON S	PSU
TECAMID 66	PA 66	TECASON P	PPSU
TECAMID 12	PA1 2	TECASON E	PES
TECAST	PA 6 G	TECATRON	PPS
TECADUR PBT	PBT	TECAPEEK	PEEK
TECAPET	PET	TECASINT	PI
TECANAT	PC	TECAFINE	PE/PPH/PMP
TECAFLON PVDF	PVDF	TECARAN	ABS
TECAFLON ETFE	ETFE	TECANYL	PPE

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