



TECHNICAL DATA SHEET

PRODUCT CODE :	THERMOFIL H400D00 NATUREL
CATEGORY :	Flame Retardant, Advanced Engineering
DESCRIPTION :	Halogen free flame retardant, 20% glass coupled PP homopolymer, high performances.
SPECIFICATIONS :	-
TYPICAL APPLICATIONS :	Battery, E&E

GENERAL PROPERTIES	Methods	Units	Values	
Reinforcement Content	Internal	%	20	
Recycle Content	Internal	%	-	
Specific Gravity	ISO 1183	g/cm ³	1,15	
Melt Flow Rate	ISO 1133	g/10mn	3- 5	
Mould Shrinkage (injection flow) 2mm thickness	Internal	%	0,3 -0,5	
Mould Shrinkage (across injection flow) 2mm thickness	Internal	%	0,7-0,9	
Melt Temperature	DIN 53736	°C	165	
MECHANICAL PROPERTIES (23°C)				
Tensile Strength	ISO 527	MPa	75	
Tensile Modulus	ISO 527	MPa	6200	
Tensile Elongation	ISO 527	%	2-3	
Flexural Strength	ISO 178	MPa	115	
Flexural Modulus	ISO 178	MPa	4900	
IZOD Impact Strength	ISO 180	Notched at 23°C	KJ/m ²	-
		Unnotched at 23°C	KJ/m ²	-
		Unnotched at -30°C	KJ/m ²	-
CHARPY Impact Strength	ISO 179/1e	Notched at 23°C	KJ/m ²	10
		Unnotched at 23°C	KJ/m ²	40
ADDITIONAL PROPERTIES				
Heat Distorsion Temperature	ISO 75	0,45 MPa	°C	-
		1,81 MPa	°C	135
Vicat Temperature	B/50	°C	-	
Horizontal Combustibility (FMVSS 302)	ISO 3795	mm/mn		
Flammability Rating	UL 94	-	V0	
Glow Wire Flammability Index	IEC 60695-2-12	°C	960	
Glow Wire Ignition Temperature	IEC 60695-2-13	°C	850	
Oxygen Index	ISO 4589-2	%	-	
Comparative Tracking Index	IEC 60112	V	600	

Unless specified, values are given for natural colour. Significant variations in mechanical & flammability performances are possible for coloured versions.

Information in this publication and otherwise supplied to users is based on our general experience and is given in good faith, but because of the many particular factors which are outside our knowledge and control and affect the use of the products, no warranty is given or to be implied with respect to such information. The property values and applications quoted are believed typical but do not constitute a specification. Users should make their own tests to determine the suitability of the information and products for any particular use. Users also assume all responsibility and liability for loss or damage arising from the processing and use of the information and products. Freedom under patents, copyright and registered designs cannot be assumed. Flammability results are based on small scale laboratory tests made on injection moulded specimens.

The product mentioned herein must not be used to produce parts operating in hot and very humid environments or in contact with hot water.

SUMIKA POLYMER COMPOUNDS (FRANCE) S.A.

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S. A. AU CAPITAL DE 4,3 MILLIONS D'EUROS – RCS ARLES B 350 193 140 – 89B93 – SIRET 350 193 140 00026 – CODE APE 241L – IDENTIFICATION TVA : FR 77 350 103 140



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PRE-DRYING REQUIREMENTS :

	Units	Values
Pre-drying necessary	-	Yes
Drying temperature	°C	60-80
Drying equipment	-	-
Drying time	Hours	2-4

PROCESSING GUIDELINES :

	Units	Values
Barrel temperature profile	°C	200-240
Tool temperature	°C	30-60
Injection speed	Medium to fast	
Back Pressure	Low	
Regrind addition (maximum)	%	-

OTHERS RECOMMANDATIONS :

	Units	Values
Maximum barrel temperature	°C	250
Maximum barrel residence time	Minutes	-
<u>Others precautions</u>	<ul style="list-style-type: none">- Product containing self-extinguishing additives and should be injected with caution. Do not mold above 250°C. Avoid any stagnation of the product. Please make a good purge of the cylinder after use or after a long stop.- Do not use hot runners.	

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Validation :	LGB

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