

SHINKONG SYNTHETIC FIBERS CORP

223 YEN PING RD SEC 3 PIN CHENG TAO YUAN HSIEN TAIWAN

Material Designation: E206G30

Product Description: Polybutylene Terephthalate (PBT), 30% glass fiber reinforced, furnished as pellets.

Color	Min. Thick. (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str	IEC GWIT	IEC GWFI
NC, BK	3.0	V-0	-	-	75	75	75	-	-
	CTI: -				D495: -			IEC BP: -	

Report Date: 11/07/2002

Underwriters Laboratories Inc®

911909001

UL94 small-scale test data does not pertain to building materials, furnishings and related contents. UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in components and parts of end-product devices and appliances, where the acceptability of the combination is determined by ULI.

SHINITE

PBT

ENGINEERING PLASTIC DIVISION

SHINKONGSYNTHETICFIBERS CORPORATION

新光合成纖維股份有限公司

8th Fl., 123, Sec.2, Nanking East Road, Taipei, Taiwan

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Fax : 886-2-2506-8047 886-3-491-5763

Technical Data

SHINITE E206G30BK

FR/GF Grade / 防火/ 玻纖強化級 DE5830

		Unit	Test Method	Values
Mechanical properties	機械性質			
Izod Impact(Notched)	衝擊強度	Kg-cm/cm	ASTM D256	8.2
Tensile Strength	拉伸強度	Kg/cm ²	ASTM D638	1200
Elongation	拉伸率	%	ASTM D638	2.8
Flexural Strength	彎曲強度	Kg/cm ²	ASTM D790	1850
Flexural Modulus	彎曲模數	Kg/cm ²	ASTM D790	88000
Rockwell Hardness	洛式硬度	R	ASTM D785	120
Thermal properties	熱性質			
Heat Deflection Temperature	熱變形溫度		ASTM D648	
66psi		°C		-
264psi		°C		205
Flammability	防火性	-	UL94	V0
Melting Point	熔點	°C	DSC	223
Electrical properties	電氣性質			
Dielectric Strength	介電強度	KV/MM	ASTM D149	20
Dielectric Constant	介電常數	...	ASTM D150	4
Volume Resistivity	體積電阻	Ω-CM	ASTM D257	1.00E+16
Other properties	其它性質			
Specific Gravity	比重	-	ASTM D792	1.60
Water Absorption	吸水率	%	ASTM D570	0.07
Mold Shrinkage	成形收縮率		ASTM D955	
Flow	流動方向	%		0.2~0.4
Cross Flow	垂直方向	%		0.5~0.9

"Nothing in this information shall be construed as a recommendation for any use that may infringe on any patent right or as an endorsement of any material supplied by Shinkong Synthetic Fibers Corporation. We do not guarantee the applicability or the accuracy of this information or the performance of our products in any specific situation. We recommend each user of our products make its own tests to determine if the material is suitable for a particular use. The data show here are within the normal range of product properties, but they are NOT SPECIFICATION LIMITS. Additives of any kind alter some or all of the properties."



Test Report


SHINKONG SYNTHETIC FIBERS CORPORATION
8F., NO. 123, SEC. 2, NANKING E. RD., TAIPEI, TAIWAN

Report No. : CE/2005/10320
Date : 2005/01/11
Page : 1 of 3

The following merchandise was (were) submitted and identified by the client as :

Type of Product : THERMOPLASTIC POLYESTER RESIN
Style/Item No : SHINITE @PBT E206G30BK
Manufacturer/Vendor : SHINKONG SYNTHETIC FIBERS CORPORATION
Sample Received : 2005/01/04
Testing Date : 2005/01/04 TO 2005/01/11

=====
Test Result : - Please see the next page -


Daniel Yen, M.R. / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.



Test Report

SHINKONG SYNTHETIC FIBERS CORPORATION
8F., NO. 123, SEC. 2, NANKING E. RD., TAIPEI, TAIWAN

Report No. : CE/2005/10320
Date : 2005/01/11
Page : 2 of 3

Test Result

PART NAME NO.1 : BLACK PLASTIC PELLETS (PLEASE REFER TO THE PHOTO ATTACHED)

Test Item (s):	Unit	Method	MDL	Result
				No.1
PBBs(Polybrominated biphenyls)(CAS NO:059536-65-1)	%	With reference to USEPA3540 or USEPA3550. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	N.D.
PBBEs(PBDEs)(Polybrominated biphenyl ethers)	%	With reference to USEPA3540 or USEPA3550. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	N.D.

Test Item (s):	Unit	Method	MDL	Result
				No.1
Chromium VI (Cr+6)	ppm	As per US EPA 7196A and US EPA 3060A.	2	N.D.
Cadmium (Cd)	ppm	ICP-AES after as per EN 1122, method B:2001 or other acid digestion.	2	N.D.
Mercury (Hg)	ppm	ICP-AES after as per US EPA 3052 or other acid digestion.	2	N.D.
Lead (Pb)	ppm	ICP-AES after as per US EPA 3052 or other acid digestion.	2	N.D.

NOTE • (1) N.D. = Not detected (<MDL)
(2) ppm = mg/kg
(3) MDL = Method Detection Limit

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Test Report

SHINKONG SYNTHETIC FIBERS CORPORATION
8F., NO. 123, SEC. 2, NANKING E. RD., TAIPEI, TAIWAN

Report No. : CE/2005/10320
Date : 2005/01/11
Page : 3 of 3



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Test Report

EXCELLENCE WIRE IND. CO., LTD.
NO.13, LANE39, SEC.2, CHANG AN RD., LUCHU
HSIANG, TAOYUAN HSIEN 338, TAIWAN, R.O.C.

Report No. : CE/2004/61219
Date : 2004/06/18
Page : 1 of 3

The following merchandise was (were) submitted and identified by the client as :

Type of Product : GOLD WIRE 0.45MM
Sample Received : 2004/06/11
Testing Date : 2004/06/11 TO 2004/06/18

Test Result : - Please see the next page -




Daniel Yeh, M.R. - Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.

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Test Report

EXCELLENCE WIRE IND. CO., LTD.
 NO.13, LANE39, SEC.2, CHANG AN RD., LUCHU
 HSLANG, TAOYUAN HSIEN 338, TAIWAN, R.O.C.

Report No. : CE/2004/61219

Date : 2004/06/18

Page : 2 of 3,



Test Result

PART NAME NO.1 : GOLDEN COLORED METAL WIRE

Test Item (s):	Unit	Method	MDL	Result				
				No.1				
Arsenic (As)	ppm	ICP-AES after as per US EPA 3052 or other acid digestion.	2	N.D.				
Barium (Ba)	ppm	ICP-AES after as per US EPA 3050B or other acid digestion.	2	N.D.				
Cadmium (Cd)	ppm	ICP-AES after as per EN 1122, method B:2001 or other acid digestion.	2	N.D.				
Mercury (Hg)	ppm	ICP-AES after as per US EPA 3052 or other acid digestion.	2	N.D.				
Phosphorus (P)	ppm	ICP-AES after as per US EPA 3050B or other acid digestion.	2	705.3				
Lead (Pb)	ppm	ICP-AES after as per US EPA 3050B or other acid digestion.	2	19.6				
Antimony (Sb)	ppm	ICP-AES after as per US EPA 3050B or other acid digestion.	2	N.D.				
Selenium (Se)	ppm	ICP-AES after as per US EPA 3052 or other acid digestion.	2	N.D.				
Tin (Sn)	ppm	ICP-AES after as per US EPA 3050B or other acid digestion.	2	52605.0				
Zinc (Zn)	ppm	ICP-AES after as per US EPA 3050B or other acid digestion.	2	127.3				

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TW0333622



Test Report

EXCELLENCE WIRE IND. CO., LTD.
 NO.13, LANE39, SEC.2, CHANG AN RD., LUCHU
 HSIANG, TAOYUAN HSIEN 338, TAIWAN, R.O.C.

Report No. : CE/2004/61219
 Date : 2004/06/18
 Page : 3 of 3,

Test Item (s):	Unit	Method	MDL	Result			
				No.1			
Chromium VI (Cr+6)	ppm	As per US EPA 7196A and US EPA 3060A.	2	N.D.			

- NOTE:
- (1) N.D. = Not detected. (<MDL)
 - (2) ppm = mg/kg
 - (3) MDL = Method Detection Limit
 - (4) " --- " = Not Applicable
 - (5) " - " = No Regulation
 - (6) * = Results shown are of the adjusted analytical results
 - (7) ** = Qualitative analysis (No Unit)
 - (8) Negative = Undetectable / Positive = Detectable



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TW0933523

FISCHERSCOPE X - RAY TEST RECORD

F I S C H E R T E C H N O L O G Y
 EXCELLENCE WIRE INDUSTRIAL CO., LTD.
 TELEPHONE : (03) 3222129

PART NO: DATE : 2005/3/3
 BATCH NO: N.W : g.
 BATCH SIZE : 15 u" NAME : 簡秋鳳

N = 1	THICKNESS	=	16.08	=	84.01
N = 2	THICKNESS	=	15.91	=	75.61
N = 3	THICKNESS	=	15.62	=	88.33
N = 4	THICKNESS	=	16.27	=	79.58
N = 5	THICKNESS	=	16.36	=	88.64

F I N A L R E S U L T

THICKNESS MEASUREMENT

APPLICATION NO. - 111

M E A N	THICKNESS	=	16.048	=	83.234
STANDARD	DEVIATION	=	0.297	=	5.641
COEFF. OF	VARIATION (%)	=	1.848	=	6.778
LOWEST	READING	=	15.618	=	75.608
HIGHEST	READING	=	16.361	=	88.637
NO. OF	MEAS.	=	5	=	5
MEASURING	TIME (S)	=		=	30



양식번호	YL-B401-6		試驗成績書				永林電子			
改正番活							Office 71-1, Yangbeol-ri, Opo-yup. Kwangju-si, Kyunggi-do, Korea			
改正日字	2002.12.20		2004年05月27				TEL(82-31)766-0270 FAX(82-31)765-4890			
納品處	EXW					規格名				
規格	Ø0.450mm	硬度	H			品名	C5100W			
LOT NO						名稱	PBW			
區分	值數			公差	外觀	LOT.SIZE				
	規格	規格	規格			Roll	KGS			
SPEC	Ø0.450mm	Ø0.450mm		+0.005 -0.000			4,960			
DATA	Ø0.452mm	Ø0.452mm			OK					
	Ø0.452mm	Ø0.452mm			OK					
	Ø0.452mm	Ø0.452mm			OK					
化學成分										
區分	化學成分 (%)									
	Cu	Pb	Sn	Fe	Zn	Mn	P	Cu+Sn+P		
SPEC	Rem	0.05max	4.2~5.8	0.01max	0.03max	-	0.03~0.35	99.5min		
DATA	95.1173	0.00214	4.7358	0.0085	0.00874	-	0.12751			
機械的 . 物理的 性質										
區分	機械的性質									
	引張強度(N/mm ²)		延伸率(%)	Resistance(m ² /4cm)						
SPEC	950 ~ 1100		-	23 ~ 27						
DATA	1,007			25.6						
We certify above test results are true and correct.							綜合判定			
永 林 電 子										
品質管理擔當者：鄭 然 模										

