

Test Report


CHANG CHUN PLASTICS CO., LTD.
7TH FL., 301, SONG KIANG ROAD, TAIPEI, TAIWAN,
R.O.C.

Report No : CE/2004/34163
Date : 2004/04/08
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The following merchandise was(were) submitted and identified by the client as :

Type of Product : POLYBUTYLENE TEREPHTHALATE
Style/Item No : PBT 4130
Sample Received : 2004/03/31.
Testing Date : 2004/03/31 TO 2004/04/08

Test Result : - Please see the next page -


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

TW 0687468

長春人造樹脂廠股份有限公司

台北市松江路三〇一號七樓

CHANG CHUN PLASTICS CO., LTD.


NO. 301, SONGKIANG ROAD, 7TH FL.
TAIPEI, 10477 TAIWAN

CCP PBT 4130 PROPERTIES

MATERIAL : PBT4130

VENDOR: CHANG CHUN PLASTICS CO., LTD.

TEST ITEM	TEST METHOD	UNIT	QC RANGE
比重 (SPECIFIC GRAVITY)	ASTM D-792		1.63-1.67
灰份 (ASH)		%	28-32
抗張強度 (TENSILE STRENGTH)	ASTM D-638	KG/CM ²	MIN1500
伸長率 (ELONGATION)	CCP METHOD	%	MIN3.5
抗折強度 (FLEXURAL STRENGTH)	ASTM D-790	KG/CM ²	MIN1800
抗折模數 (MODULUS)	ASTM D-790	KG/CM ²	MIN75000
衝擊強度 (IMPACT STRENGTH, NOTCHED)	ASTM D256	KG-CM/CM	MIN7.0
熔融指數 (MELT INDEX)	ASTM D-1238	g/10MIN	12-17

Customer:	Commodity: C 2680 R BRASS STRIP (H)	 ISO 9002:4M8Y035-00 台正字第 3544 號
Applied Standard: CNS 4383 Brass Sheets, Plates and Strips		

Chemical Analysis Test										
Work No.	Size of Product			Cu(%)	Fe(%)	Pb(%)	Zn(%)			
	Thickness (mm)	Width (mm)	Length (mm)							
	Standard									
				64.00 - 68.00	max. 0.050	max. 0.070	REM.			
18A396B	0.600	34.000		64.850	0.035	0.004	REM.			

Mechanical & Physical Test										
Work No.	Size of Product			Dimension Test		Tension Test		Hardness Test HV	Grain Size (mm)	Electric Conductivity (%)
	Thickness (mm)	Width (mm)	Length (mm)	Thickness (mm)	Width (mm)	Tensile Strength (kgf/mm ²)	Elongation (%)			
	Standard			-	(-) 0.10 - (+) 0.00	42 - 55	-			
18A396B	0.600	34.000		GOOD.	GOOD.	48.25	21.92	150.0 - 150.0	-	24.4

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Test Item(s):	Unit	Method	MDL	Result			
				NO.1			
Organic-tin compounds							
Triphenyl Tin(TPT)(CAS NO:000668-34-8)	ppm	With reference to 83/677/EEC & DIN 38407. Analysis was performed by GC/FPD.	0.001	N.D.			
Tributyl Tin(TBT)	ppm	With reference to 83/677/EEC & DIN 38407. Analysis was performed by GC/FPD.	0.001	N.D.			
Test Item(s):	Unit	Method	MDL	Result			
PBBs(Polybrominated biphenyls)(CAS NO:67774-32-7)	%	With reference to 83/264/EEC. Analysis was performed by HPLC/DAD/MS.	0.0005	N.D.			
Test Item(s):	Unit	Method	MDL	Result			
PBBEs(PBDEs)(Polybrominated biphenyl ethers)	%	With reference to 83/264/EEC. Analysis was performed by HPLC/DAD/MS.	0.0005	N.D.			
Test Item(s):	Unit	Method	MDL	Result			
PCBs(Polychlorinated Biphenyls)(CAS NO:001336-36-3)	ppm	With reference to US EPA 8082,89/677/EEC. Analysis was performed by GC/ECD/MS.	0.5	N.D.			
Test Item(s):	Unit	Method	MDL	Result			
Polychlorinated Naphthalene	ppm	Analysis was performed by GC/MS.	5	N.D.			
Test Item(s):	Unit	Method	MDL	Result			
PCTs(Polychlorinated Terphenyls)	ppm	With reference to US EPA 8082,89/677/EEC. Analysis was performed by GC/ECD/MS.	0.5	N.D.			

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TW 0687460

Test Report

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Test Item(s):	Unit	Method	MDL	Result		
				NO.1		
PVC free(CAS No:9002-86-2)	**	Analysis was performed by FTIR/ATR AND Pyro-GC/MS.	-	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.		
Nickel (Ni)	ppm	ICP-AES After As per US EPA 3050B or other acid digestion.	2	5.9		
Lead (Pb)	ppm	ICP-AES After As per US EPA 3050B or other acid digestion.	2	N.D.		

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

- END -

Test Report

MINCHALI METAL INDUSTRY CO., LTD.
11, PEI YUAN ROAD, CHUNG LI CITY, TAIWAN,
R.O.C.

Report No. : CE/2004/63189
Date : 2004/07/01
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The following merchandise was (were) submitted and identified by the client as :

Type of Product : 黃銅
Style/Item No : C2680(65/35)
Manufacturer/Vendor : MINCHALI METAL INDUSTRY CO., LTD.
Country of Origin : TAIWAN
Sample Received : 2004/06/24
Testing Date : 2004/06/24 TO 2004/07/01

Test Result : - Please see the next page -


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

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Test Report

MINCHALI METAL INDUSTRY CO., LTD.
11, PEI YUAN ROAD, CHUNG LI CITY, TAIWAN,
R.O.C.

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Test Result

PART NAME NO.1 : GOLDEN COLORED METAL

Test Item (s):	Unit	Method	MDL	Result				Spec.
				No.1				
EN 71 PART 3 Heavy metal content		As per EN 71 PART 3 : 1994 (A1 : 2000) (EN 71 & BS 5665 are identical)						PASS
Soluble Lead (Pb)	ppm	ICP-AES	5	< 5.0				90
Soluble Antimony (Sb)	ppm	ICP-AES	5	< 5.0				60
Soluble Arsenic (As)	ppm	ICP-AES	2.5	< 2.5				25
Soluble Barium (Ba)	ppm	ICP-AES	10	< 10.0				1000
Soluble Cadmium (Cd)	ppm	ICP-AES	5	< 5.0				75
Soluble Chromium (Cr)	ppm	ICP-AES	5	< 5.0				60
Soluble Mercury (Hg)	ppm	ICP-AES	5	< 5.0				60
Soluble Selenium (Se)	ppm	ICP-AES	5	< 5.0				500

Test Item (s):	Unit	Method	MDL	Result				Spec.
				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 3050B or other acid digestion.	2	33.7				-

- NOTE: (1) N.D. = Not detected (<MDL)
(2) ppm = mg/kg
(3) MDL = Method Detection Limit
(4) " - " = No Regulation

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