

設計驗證
工程課
2023.10.17
發行
鈺緯科技開發股份有限公司

承　認　書

SPECIFICATION FOR APPROVAL

客　　戶 MESSRS：鈺緯科技開發股份有限公司

日　　期 DATE：2023/07/14

品　　名 PART NAME：H TUBE (∮1.5*L20,CYG-ZHP,KTG)

物料代號 PART NO.：3N160000170 (N0002)

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鈺緯科技開發股份有限公司

福盈電子有限公司

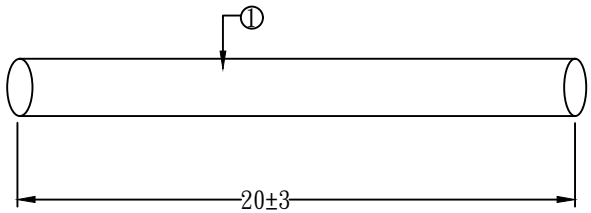
東莞塘廈福盈電子廠

總公司：台北市內湖區成功路四段 223 巷 15 弄 8 號

TEL：(02) 2790-7366　　FAX：(02) 2793-1393

中國廠：東莞市塘廈鎮宏業北十三路 188 號 B 棟 4F

TEL：(0769) 8791-0131~2　　FAX：(0769) 8791-0130



項目	材料名稱	用量
1	HEAT SHRINK TUBE:BLACK 1.5Ø L=20±3mm CYG-ZHP,KTG 此為特殊無紅磷套管	1PCS

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項目	變更內容	日 期
3		
2		
1		

制 作	審 核	核 准	比 例		客戶名稱：鈺緯科技開發股份有限公司
余加民	余加民	王子豪	單 位	mm	
福盈電子有限公司 FUW YNG ELECTRONICS CO.,LTD			版本/版次	A0	機種：
			頁 次	1/1	料號：3N160000170 (N0002)
			制作日期	2023.07.11	圖紙編號：DI12071101

KTG 长园电子

长园电子（东莞）有限公司
CHANGYUAN ELECTRONICS (DONGGUAN) CO.,LTD

承 认 书
CERTIFICATION

客户名称： Customer Name:
产品名称：无卤无红磷环保热收缩套管 Products Name: Zero Halogen and Red Phosphorus Heat Shrinkable Tube
产品规格： Φ0.7-Φ100.0（适用于所有颜色） Products Size: Φ0.7-Φ100.0
产品型号： 无卤环保型(125℃ UL CUL) Products Type: CYG-ZHP Type (125℃ UL CUL)

客 户 签 名 CUSTOMER		长 园 电 子 签 名 CHANGYUAN	
核 准 Approved by	接 收 Received by	核 准 Approved by	主 办 Charged by
		长园电子(东莞)有限公司 质量部	杨勇
日 期 Date	日 期 Date	日 期 Date	日 期 Date
		2022-10-19	2022-10-19

地址：广东省东莞大朗镇富民工业二园宝陂工业区
Add: Baopi Industrial District, Fumin Industrial Park 2#, Dalang Town, Dongguan, 523770 China
电话 Tel： 0769-89619666
传真 Fax：0769-89388002
网址 http://www.cyg-dz.com
E-mail: internalsales@cyelectr.com;sales@cyelectr.com

一. 特性参数 Specifications

项　　目 Item		无卤环保型 CYG-ZHP
收缩温度（℃） Shrink Temperature		120-150
温度等级（℃） Temperature Range		125
径向收缩率（%） Radial Shrinking Ratio		≥50
轴向收缩率（%） Longitudinal Shrinking Ratio		≤±5
抗张强度（MPa） Tensile Strength		≥10.4
断裂伸长率（%） Ultimate Elongation		≥200
空气烘箱老化 Aging in circulating-air oven		（158±1.0）℃，7 天 （158±1.0）℃,7days
老化后 After aging	抗张强度（MPa） Tensile Strength	≥7.3
	断裂伸长率（%） Ultimate Elongation	≥100
耐电压等级（V）， Dielectric Voltage Withstand		600
体积电阻率（Ω·cm） Volume　Resistivity		10^{14}
击穿电压(V),AC Dielectric voltage		AC2500V-60S，不击穿 AC2500V-60S，no breakdown
耐压强度（kV/mm） Dielectric　Strength		≥15
燃烧性 Flammability		VW-1
同心率（%） Concentricity		≥65
热冲击 Heat shock		（250±1）°C，4 小时后不开裂 4 hours at 250.0 ± 1.0 °C,No cracking
冷弯曲 Cold bend		（-30±1）°C，1 小时后不开裂 1 hour at –30 ± 1.0 °C,No cracking
裸铜腐蚀性 Corrosion of the bare copper		〖(95±5)%、23°C, 24 小时〗+〖(158±1.0)℃，7 天〗后无开裂、不褪色 〖(95±5)%、23°C, 24 hours〗+〖(158±1.0)℃，7days〗，No cracking,No fade

二.无卤无红磷环保型热缩管成品尺寸规格(CYG-ZHP Heat Shrinkable Tube)

规 格 Size	收缩前尺寸(mm) As Supplied		完全收缩后尺寸(mm) After Recovery		包装长度（米/盘）Packing Length (Meter/Roll)
	内 径(D) Inside diameter	平均壁厚(T) Wall-thickness	内 径(d) Inside diameter	平均壁厚(t) Wall-thickness	
Φ0.7	1.0+0.2/-0.1	0.18±0.05	≤0.45	0.32±0.08	300
Φ0.8	1.2+0.2/-0.1	0.18±0.05	≤0.45	0.34±0.08	300
Φ1.0	1.5+0.2/-0.1	0.18±0.05	≤0.60	0.36±0.08	400
Φ1.5	2.1+0.2/-0.1	0.18±0.05	≤0.80	0.36±0.08	400
Φ2.0	2.5+0.2/-0.1	0.20±0.05	≤1.00	0.42±0.08	400
Φ2.5	3.0+0.2/-0.1	0.22±0.05	≤1.25	0.46±0.08	400
Φ3.0	3.5+0.2/-0.1	0.22±0.05	≤1.50	0.46±0.08	400
Φ3.5	4.0+0.2/-0.1	0.22±0.05	≤1.75	0.46±0.08	200
Φ4.0	4.6+0.2/-0.1	0.22±0.05	≤2.00	0.46±0.08	200
Φ4.5	5.0+0.2/-0.1	0.23±0.05	≤2.25	0.46±0.08	100
Φ5.0	5.5+0.2/-0.1	0.25±0.05	≤2.50	0.50±0.08	100
Φ5.5	6.0+0.2/-0.1	0.25±0.05	≤2.75	0.50±0.08	100
Φ6.0	6.5+0.2/-0.1	0.25±0.05	≤3.00	0.55±0.10	100
Φ6.5	6.9+0.2/-0.1	0.25±0.05	≤3.25	0.55±0.10	100
Φ7.0	7.5+0.2/-0.1	0.25±0.05	≤3.50	0.55±0.10	100
Φ8.0	8.5+0.2/-0.1	0.28±0.06	≤4.00	0.58±0.10	100
Φ9.0	9.5+0.2/-0.1	0.28±0.06	≤4.50	0.58±0.10	100
Φ10	10.5+0.3/-0.1	0.28±0.06	≤5.00	0.58±0.10	100
Φ11	11.5+0.3/-0.1	0.28±0.06	≤5.50	0.58±0.10	100
Φ12	12.5+0.3/-0.1	0.28±0.06	≤6.00	0.58±0.10	100
Φ13	13.5+0.3/-0.1	0.28±0.06	≤6.50	0.58±0.10	100
Φ14	14.5+0.3/-0.1	0.28±0.06	≤7.00	0.58±0.10	100
Φ15	15.5+0.3/-0.1	0.28±0.06	≤7.50	0.58±0.10	100
Φ16	16.5+0.3/-0.1	0.28±0.06	≤8.00	0.58±0.10	100
Φ17	17.5+0.3/-0.1	0.28±0.06	≤8.50	0.58±0.10	100
Φ18	18.5+0.3/-0.1	0.32±0.08	≤9.00	0.68±0.10	100
Φ20	20.6+0.5/-0.2	0.32±0.08	≤10.0	0.68±0.10	100
Φ22	22.6+0.7/-0.2	0.35±0.08	≤11.0	0.72±0.12	100
Φ25	25.6+0.7/-0.2	0.40±0.10	≤12.5	0.78±0.12	50
Φ28	28.6+0.7/-0.2	0.40±0.10	≤14.0	0.78±0.12	50
Φ30	30.6+0.7/-0.2	0.40±0.10	≤15.0	0.82±0.12	50
Φ35	35.6+0.7/-0.2	0.45±0.10	≤17.5	0.92±0.12	25
Φ40	41.0±0.5	0.50±0.12	≤20.0	1.00±0.15	25
Φ45	46.0±0.5	0.50±0.12	≤22.5	1.00±0.15	25
Φ50	51.0±0.5	0.55±0.15	≤25.0	1.10±0.15	25
Φ55	55.5±1.0	0.55±0.15	≤27.5	1.10±0.15	25
Φ60	60.5±1.0	0.60±0.15	≤30.0	1.25±0.20	25
Φ70	71.0±1.0	0.60±0.15	≤35.0	1.25±0.20	25

Φ80	81.0±1.0	0.60±0.15	≤40.0	1.25±0.20	25
Φ90	91.0±1.0	0.60±0.15	≤45.0	1.25±0.20	25
Φ100	101.0±1.0	0.60±0.15	≤50.0	1.25±0.20	25

备注(Remark)：

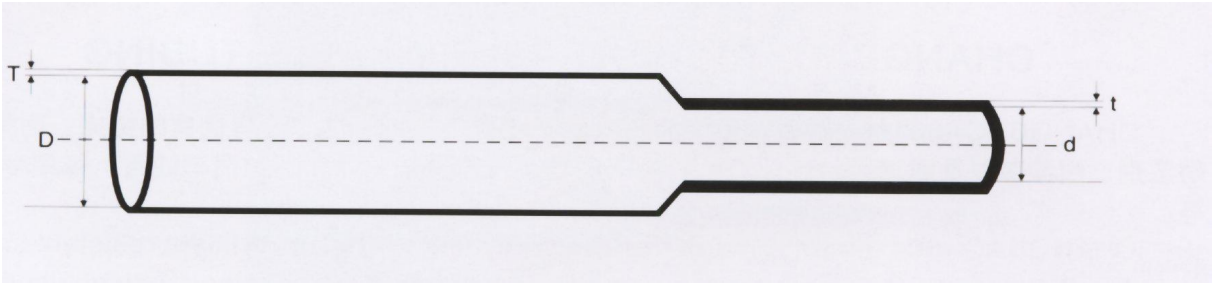
1.标准颜色为黑色,可接受其他颜色订货（Standard Black, Special colors available on request.）

2.可接受特殊规格产品订单（Other sizes are available upon special order）；

3.内径默认使用精确到小数点一位塞规量测；

4.检验成品壁厚时以平均壁厚管控，即壁厚要同时满足“壁厚测量的最大值与最小值形成的均值要落在上表给出的壁厚范围内”、“ 成品壁厚同心率要求：≥65%”两个条件 。

三．无卤无红磷环保型热缩套管工程图(Engineering Picture of CYG-ZHP Heat-shrinkable Tube)



备注(Remark)：

1. 无卤无红磷环保型产品印字内容(Printing Contents of CYG-ZHP Type Tube)：

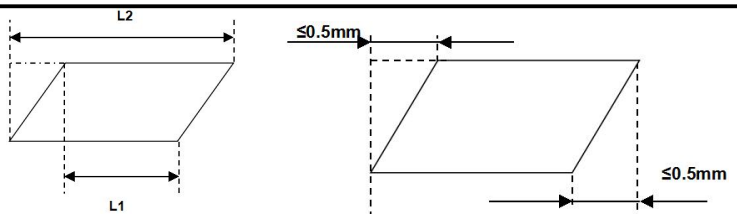
KTG CYG-ZHP TUBE E180908 ®&c® 125℃ 600V VW-1 -F- (Φsize/收缩后内径尺寸)

单位(Unit)：	日期(Date)：	名称(Name)：	图号(No.)：
毫米(mm)	2022-10-19	CYG-ZHP 型热收缩套管	CYG-ZHP

长园电子（东莞）有限公司

CHANGYUAN ELECTRONICS（DONGGUAN）CO.,LTD

四. 外观检验标准

<table>
<tr><th>疵点名称
Flaw</th><th>检验标准
Test Standard</th><th>判定
determinant</th></tr>
<tr><td>接头数
Number of joints</td><td>每盘允许 3 个，接头处用绿色胶带标识。
Each disc is allowed to have no more than three joints, and the joints are marked with green tape.</td><td>合格
OK</td></tr>
<tr><td>脏污
smudge</td><td>点状 5 点，块状 3-6mm 一处，每盘允许 5 个
The number of dots is less than 5, and the mass stain is 3-6 mm, each plate is allowed 5.</td><td>合格
OK</td></tr>
<tr><td>印字不良
Poor printing</td><td>肉眼能辨识印字内容，不缺字、不断字、无明显重影。每米油墨点不超过 1 个，油墨点直径在 1mm 以内，可允收。
The naked eye can recognize the printed content, without lack of words, continuous words, no obvious duplication. No more than 1 ink point per meter, ink point diameter less than 1 mm, acceptable.</td><td>合格
OK</td></tr>
<tr><td>表面外观不良
Poor surface appearance</td><td>表面粗糙、轻微划伤、暗线等收缩后无明显粗糙、划伤、暗线且不影响性能判定为合格。表面颗粒每米不超过 1 个，颗粒直径在 1mm 以内判定为合格。
Rough surface, slight scratch, dark line and so on are judged to be qualified without obvious roughness, scratch and dark line after casing shrinkage without affecting performance. Surface particles are not more than 1 per meter and the diameter of particles is less than 1 mm.</td><td>合格
OK</td></tr>
<tr><td>扁管或扭曲
Flat tube or twist</td><td>轻微满足内径要求不影响外观和性能的扁管或扭曲判定为合格；严重扁管或扭曲影响内径和性能的判定为不合格。
slight flat tube or twist that meets the requirement of inner diameter and does not affect appearance and performance is qualified; a serious flat tube or twist that affects inner diameter and performance is unqualified.</td><td>OK / NG</td></tr>
<tr><td>切管不良
Poor cutting</td><td>少数切管长短不一，比例控制在千分之一之内判定为合格。
The length of a few cutting tubes varies, and the proportion is controlled within one thousandth of the pipe to be qualified.</td><td>合格
OK</td></tr>
<tr><td>切管长度
Cutting length</td><td><table>
<tr><td>长度(mm)
Length</td><td>L≤100</td><td>100＜L≤250</td><td>250＜L≤350</td><td>350＜L≤400</td><td>400＜L≤500</td><td>500＜L≤1595</td></tr>
<tr><td>公差(mm)
tolerance</td><td>±1</td><td>+2</td><td>+3/-1</td><td>+4/-1</td><td>+5/-1</td><td>+6</td></tr>
</table></td><td>合格
OK</td></tr>
<tr><td>切管斜口
Pipe slant</td><td>

1、对于包括φ7 以下的套管，按图一进行管控，即 L2-L1≤1.6mm；
2、对于φ7 以上规格的套管，按图二进行管控
1. For the casing including the casing below 7, the control shall be carried out according to Fig. 1, i.e. L2-L1 1.6mm;
For casing with specifications above 7, control shall be carried out according to Figure 2.</td><td>合格
OK</td></tr>
</table>

五. 材质证明

原料名称			使用目的	含量	供应商	CAS No.	产地
品名	简称	分子式					
乙烯醋酸乙烯酯共聚物	EVA	（CH_2-CH_2）m -(CH_2-CH-$COOCH_3$)n	主剂	≥49%	扬巴 BASF-YPC	24937-78-8	南京
氢氧化镁	MDH	$Mg(OH)_2$	阻燃剂	40%	华日	1309-42-8	湖南益阳
氮磷系阻燃剂	-	保密，无法提供	阻燃剂	5%	宏泰基	225789-38-8	深圳
四（3,5-二叔丁基-4-羟基）苯丙酸季戊四醇酯	抗氧剂 1010	$C_{73}H_{108}O_{12}$	抗氧剂	1%	盛世达/商琪	6683-19-8	深圳
黑色母	pigment	色粉+EVA+填充剂	着色剂	4%	恒彩	1333-86-4	东莞
油墨	--	---	印字	≤1%	信达	--	上海

一、环保材质 CYG-ZHP 无卤无红磷热缩黑色套管成分表：

原料名称			使用目的	含量	供应商	CAS No.	产地
品名	简称	分子式					
乙烯醋酸乙烯酯共聚物	EVA	（CH_2-CH_2）m -(CH_2-CH-$COOCH_3$)n	主剂	≥49%	扬巴	24937-78-8	南京
氢氧化镁	MDH	$Mg(OH)_2$	阻燃剂	15-40 %	华晟、锦昊辉	1309-42-8	湖南益阳、深圳
氮磷系阻燃剂	-	保密，无法提供	阻燃剂	5-15 %	宏泰基、卫东	-	深圳、寿光
四（3,5-二叔丁基-4-羟基）苯丙酸季戊四醇酯	抗氧剂 1010	$C_{73}H_{108}O_{12}$	抗氧剂	0.3-1 %	盛世达、利安隆	6683-19-8	深圳、天津
黑色母	pigment	色粉+EVA+填充剂	着色剂	4%	恒彩、博彩	1333-86-4	东莞、深圳
油墨	--	---	印字	≤1%	捷信、信华、悦海	--	上海、东莞、德国

二、环保材质 CYG-ZHP 无卤无红磷热缩白色套管成分表（不添加任何色母）：

原料名称			使用目的	含量	供应商	CAS No.	产地
品名	型号	分子式					
乙烯醋酸乙烯酯共聚物	EVA	（CH_2-CH_2）m -(CH_2-CH-$COOCH_3$)n	主剂	≥53%	扬巴	24937-78-8	南京
氢氧化镁	MDH	$Mg(OH)_2$	阻燃剂	15-40 %	华晟、锦昊辉	1309-42-8	湖南益阳、深圳
氮磷系阻燃剂	-	保密，无法提供	阻燃剂	5-15%	宏泰基、卫东	-	深圳、寿光
四（3,5-二叔丁基-4-羟基）苯丙酸季戊四醇酯	抗氧剂 1010	$C_{73}H_{108}O_{12}$	抗氧剂	0.3-1 %	盛世达、利安隆	6683-19-8	深圳、天津
油墨	--	---	印字	≤1%	捷信、信华、悦海	--	上海、东莞、德国

三、环保材质 CYG-ZHP 无卤无红磷热缩红色套管成分表（其它颜色与此红色成分相同，需要选择对应的彩色母）

原料名称			使用目的	含量	供应商	CAS No.	产地
品名	型号	分子式					
乙烯醋酸乙烯酯共聚物	EVA	（CH_2-CH_2）m -(CH_2-CH-$COOCH_3$)n	主剂	≥49%	扬巴	24937-78-8	南京
氢氧化镁	MDH	$Mg(OH)_2$	阻燃剂	15-40 %	华晟、锦昊辉	1309-42-8	湖南益阳、深圳
氮磷系阻燃剂	-	保密，无法提供	阻燃剂	5-15 %	宏泰基、卫东	-	深圳、寿光
四（3,5-二叔丁基-4-羟基）苯丙酸季戊四醇酯	抗氧剂 1010	$C_{73}H_{108}O_{12}$	抗氧剂	0.3-1 %	盛世达、利安隆	6683-19-8	深圳、天津
红色母 pigment	--	色粉+EVA+填充剂	着色剂	4%	恒彩、博彩	-	东莞、深圳
油墨	--	---	印字	≤1%	捷信、信华、悦海	--	上海、东莞、德国

3、环保材质 CYG-ZHP 无卤无红磷热缩红色套管成分表（其它颜色与此红色成分相同，需要选择对应的彩色母）

《CYG-ZHP 正常壁厚热缩套管承认书》变更历史

日期	版本	变更内容	变更人	批准人	备注
13-12-31	D/0	⑴公司标志和名称变更为“长园电子（集团）有限公司； ⑵为消除客户误解调整了规格表中内径计数方式为小数点后一位小数、收缩温度更改为“120-150℃”； ⑶更改为最新的联络方式。	赵军华	童晓明	
14-04-16	D/1	Φ0.7 套管完全收缩后的内径应是“≤0.45”，实际产品的印字内容没有错误。	赵军华	童晓明	
14-6-21	D/2	为区分该型号产品于 CB-HFT，对 CYG-ZHP 原印字内容整体变更，在原有印字内容基础上在印字下方增加虚线，虚线长度覆盖到所有套管长度。	赵军华	童晓明	
14-8-8	D/3	公司名称增加“长园电子（东莞）有限公司”，地址变更为东莞公司的地址。	赵军华	童晓明	
14-11-24	D/4	增加规格，调整后成品规格范围同 CB-HFT。	王存宽	赵军华	
16-4-25	D/5	为让客户详细清楚铜腐蚀测试方法，细化铜腐蚀测试为“〖（95±5）%、23°C，24 小时〗+〖（158±1.0）℃，7 天〗后无开裂、不褪色 〖（95±5）%、23°C，24 hours〗+〖（158±1.0）℃，7days〗，No cracking,No fade”。	赵军华	童晓明	
17-11-08	D/6	更改 1.0-3.0 的包装米数	杨勇	赵军华	
19-04-21	D/7	增加对内径壁厚量测说明及外观标准说明	杨勇	赵军华	
20-07-27	G/0	增加材质证明，更换 KTG 标志	杨勇	赵军华	

Client Name : CHANGYUAN ELECTRONICS GROUP CO.,LTD/CHANGYUAN ELECTRONICS （DONGGUAN）CO., LTD

Client Address : BID#30-4 SCIENCE& TECHNOLOGY INDUSTRY PARK, NANSHAN DISTRICT, SHENZHEN CITY, GUANGDONG PROVINCE CHINA / BAOPI INDUSTRIAL DISTRICT, FUMIN INDUSTRIAL PARK 2#, DALANG TOWN , DONGGUAN， CHINA

Sample Name : HEAT SHRINKABLE TUBE(BLACK)

Model No. : CYG-ZHP

The above sample(s) and information were provided by the client.

SGS Job No. : CP23-016317 - SZ

Date of Sample Received : 10 Apr 2023

Testing Period : 10 Apr 2023 - 18 Apr 2023

Test Requested : Selected test(s) as requested by the client.

Test Method(s) : Please refer to next page(s).

Test Result(s) : Please refer to next page(s).

Result Summary :

Test Requested	Conclusion
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU-Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)	PASS

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

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32347143

Jessie Li

Jessie Li
Approved Signatory

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Test Result(s) :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN23-052758.002	Black tube

Remarks :

(1) 1 mg/kg = 0.0001%
(2) MDL = Method Detection Limit
(3) ND = Not Detected (< MDL)
(4) "-" = Not Regulated

EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)

Test Method : With reference to IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017 , IEC 62321-6:2015 and IEC 62321-8:2017, analyzed by ICP-OES , UV-Vis and GC-MS .

Test Item(s)	Limit	Unit	MDL	002
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1000	mg/kg	2	ND
Mercury (Hg)	1000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	1000	mg/kg	8	ND
Sum of PBBs	1000	mg/kg	-	ND
Monobromobiphenyl	-	mg/kg	5	ND
Dibromobiphenyl	-	mg/kg	5	ND
Tribromobiphenyl	-	mg/kg	5	ND
Tetrabromobiphenyl	-	mg/kg	5	ND
Pentabromobiphenyl	-	mg/kg	5	ND
Hexabromobiphenyl	-	mg/kg	5	ND
Heptabromobiphenyl	-	mg/kg	5	ND
Octabromobiphenyl	-	mg/kg	5	ND
Nonabromobiphenyl	-	mg/kg	5	ND
Decabromobiphenyl	-	mg/kg	5	ND
Sum of PBDEs	1000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND
Dibromodiphenyl ether	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND

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Test Item(s)	Limit	Unit	MDL	*002*
Pentabromodiphenyl ether	-	mg/kg	5	ND
Hexabromodiphenyl ether	-	mg/kg	5	ND
Heptabromodiphenyl ether	-	mg/kg	5	ND
Octabromodiphenyl ether	-	mg/kg	5	ND
Nonabromodiphenyl ether	-	mg/kg	5	ND
Decabromodiphenyl ether	-	mg/kg	5	ND
Dibutyl phthalate (DBP)	1000	mg/kg	50	ND
Butyl benzyl phthalate (BBP)	1000	mg/kg	50	ND
Bis (2-ethylhexyl) phthalate (DEHP)	1000	mg/kg	50	ND
Diisobutyl Phthalates (DIBP)	1000	mg/kg	50	ND

Notes :

(1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.

(2) IEC 62321 series is equivalent to EN 62321 series

(3) The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w =0) stated in ILAC-G8:09/2019.

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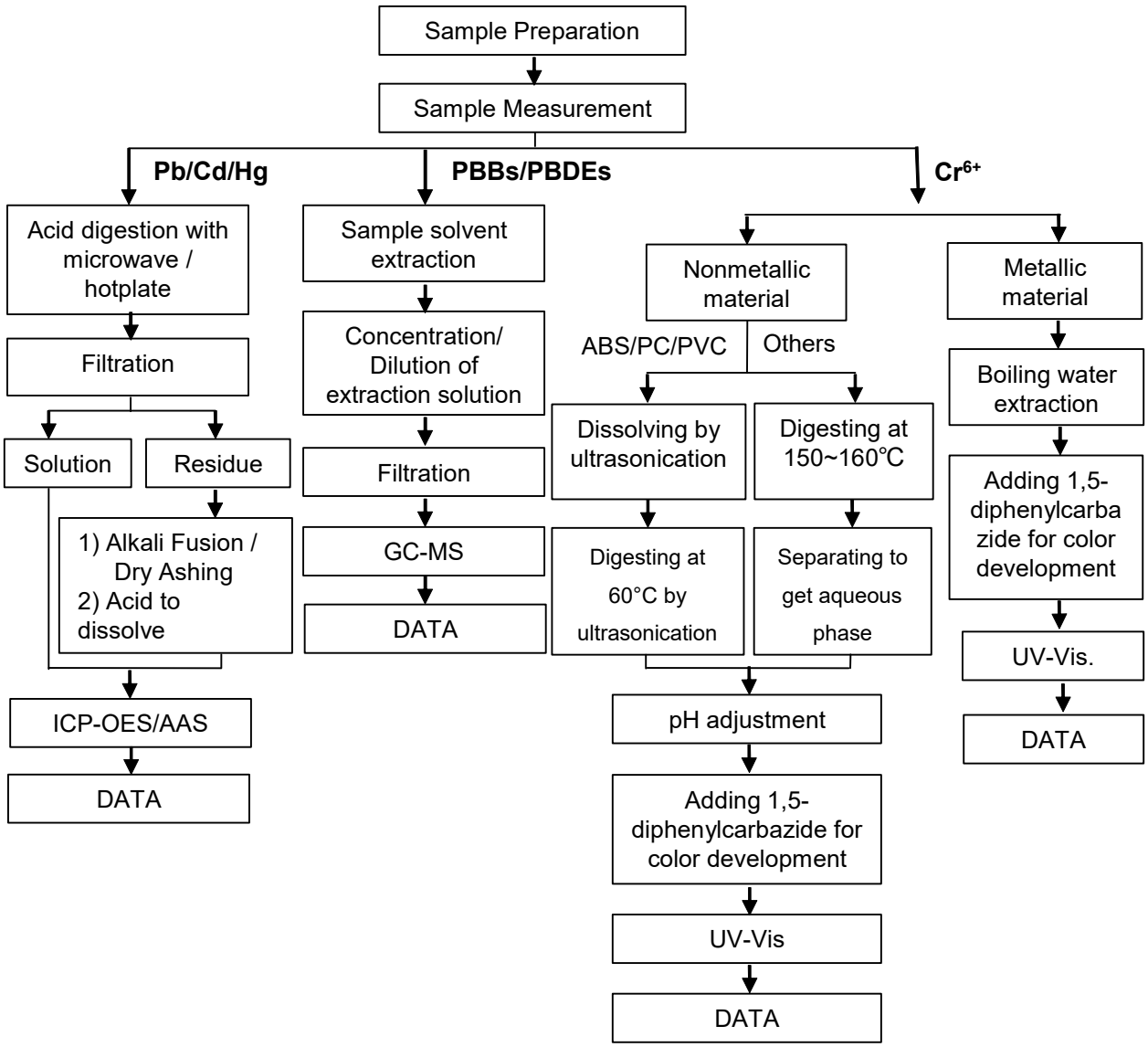
Pb/Cd/Hg/Cr^{6+}/PBBs/PBDEs Testing Flow Chart

1) These samples were dissolved totally by pre -conditioning method according to below flow chart. (Cr^{6+} and PBBs/PBDEs test method excluded).



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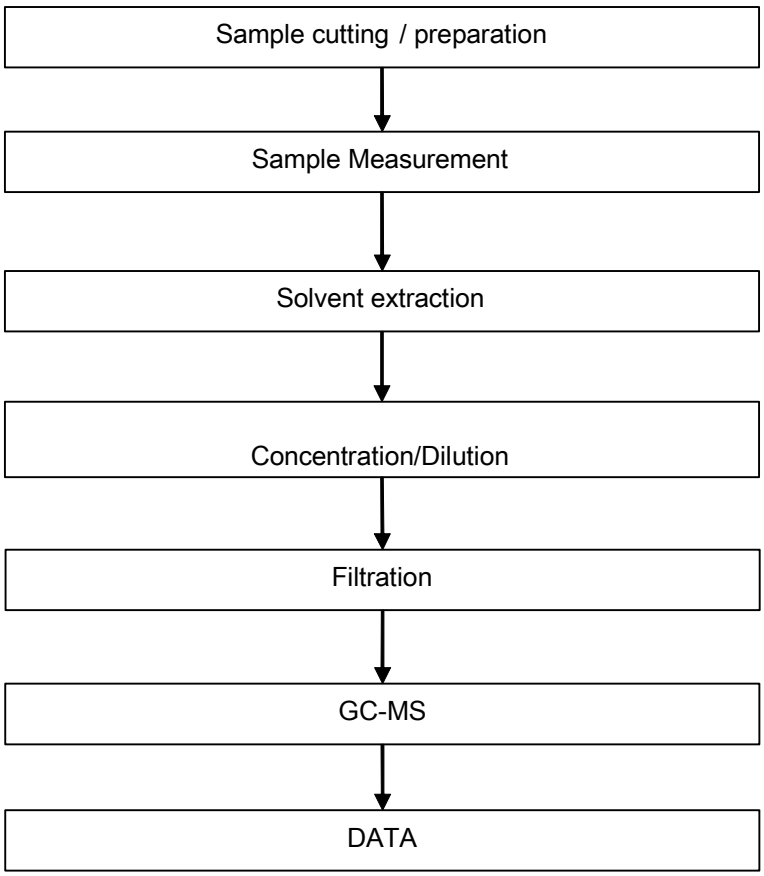
Phthalates Testing Flow Chart



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Sample photo:



CAN23-052758.002

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Test Report

Client Name : SHANGHAI JIE XIN INK CO., LTD

Client Address : SWITE 262,BUILDING5,2278 ZHAOCHONG RD TOWN, ZHONGGU TOWN,QING PU DISTRICT, SHANGHAI, P.R.C

Sample Name : WHITE INK

The above sample(s) and information were provided by the client.

SGS Job No. :	CP23-006271 - SZ
Date of Sample Received :	21 Feb 2023
Testing Period :	21 Feb 2023 - 27 Feb 2023
Test Requested :	Selected test(s) as requested by the client.
Test Method(s) :	Please refer to next page(s).
Test Result(s) :	Please refer to next page(s).

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

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5C4485EC

Dongyu Xie
Approved Signatory

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Test Result(s) :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN23-021913.001	White liquid

Remarks :

(1) 1 mg/kg = 1 ppm = 0.0001%

(2) MDL = Method Detection Limit

(3) ND = Not Detected (< MDL)

(4) "-" = Not Regulated

Halogen

Test Method : With reference to EN 14582:2016, analysis was performed by IC.

Test Item(s)	Unit	MDL	*001*
Fluorine (F)	mg/kg	50	ND
Chlorine (Cl)	mg/kg	50	68
Bromine (Br)	mg/kg	50	ND
Iodine (I)	mg/kg	50	ND

Remark: The result(s) shown is/are of the total weight of dried sample.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w =0) stated in ILAC-G8:09/2019.

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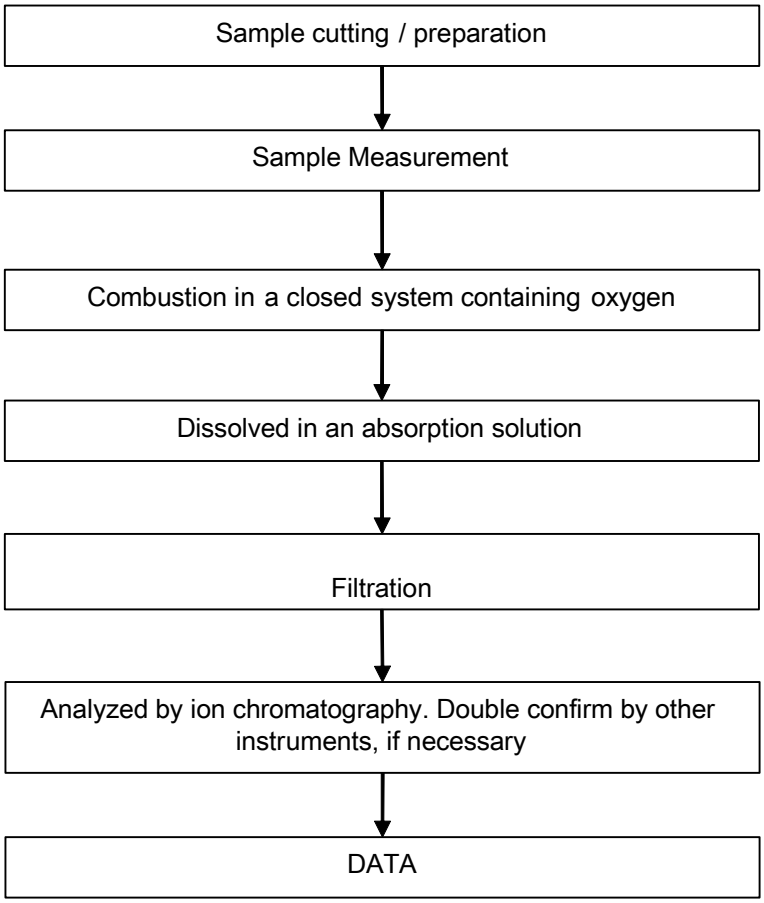
Halogen Testing Flow Chart



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Sample photo:



CAN23-021913.001

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