TÜVRheinland®

Prüfbericht - Nr.: *Test Report No.:*	**238113368m5 002**	**Seite 1 von 6** *Page 1 of 6*
Auftraggeber: *Client:*	Chi Mei Corporation No.59-1, Sanjiazi, Rende Dist., Tainan City 71702, Taiwan, R.O.C.	
Gegenstand der Prüfung: *Test Item:*	POLYCARBONATE	
Bezeichnung: *Identification:*	WONDERLITE® PC-110U	
Anlieferungszustand: *Delivery condition:*	apparent good	**Eingangsdatum:** *Date of Receipt:* 2019-12-09
Prüfort: *Testing location:*	TÜV Rheinland (Shanghai) Co. Ltd.	
Prüfgrundlage: *Test specification:*	According to RoHS (recast): Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, 2011/65/EU Annex II and its amendment Directive (EU) 2015/863: Total Content of Lead, Cadmium, Mercury, Chromium VI, Polybrominated Biphenyls, Polybrominated Diphenyl Ethers; and Benzylbutyl phthalate (BBP), Dibutyl phthalate (DBP), Bis(2-ethylhexyl) phthalate (DEHP), Diisobutyl phthalate (DIBP) and Halogen (Fluorine, Chlorine, Bromine, Iodine)	
Prüfergebnis: *Test result:*	The test results are the measurements, stated in the test report.	

geprüft: *tested by:*			**kontrolliert:** *checked by:*		
2020-01-10	Fanny Lin /Project Coordinator		2020-01-10	Anya Wang /Project Coordinator	
Datum *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*	**Datum** *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*

Sonstiges/ *Other Aspects:*

Test period: 2019-12-09 – 2020-01-02
Refers to TÜV test report no.: 238113368m3 001.
This test report supersedes test report no. 238113368m5 001.

Abkürzungen:				*Abbreviations:*			
	ok / P	=	*entspricht Prüfgrundlage*		*ok / P*	=	*passed*
	fail / F	=	*entspricht nicht Prüfgrundlage*		*fail / F*	=	*failed*
	n.a. / N	=	*nicht anwendbar*		*n.a. / N*	=	*not applicable*

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.

This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.

Test Report No. : 238113368m5 002 2020-01-10
Customer : Chi Mei Corporation
Test Method : Total Cadmium, Lead, Mercury, Chromium
- Ref. to IEC 62321-4:2013 and IEC 62321-5:2013
Chromium (VI)
- For Metal material - Ref. to IEC 62321-7-1:2015
- For Plastic or Electronic material - Ref. to IEC 62321-7-2:2017
- For Leather material - Ref. to EN ISO 17075-1:2017
PBBs, PBDEs - Ref. to IEC 62321-6:2015

Sample Material Lab.-No.		LoD	WONDERLITE® PC-110U plastic/transparent TCL191209-107
Cadmium (Cd)	mg/kg	2	n.d.
Lead (Pb)	mg/kg	2	n.d.
Mercury (Hg)	mg/kg	2	n.d.
Chromium VI (Cr VI)*	mg/kg	8	n.d.
Sum of Polybrominated biphenyls (PBBs)	mg/kg	-	n.d.
Monobromobiphenyl	mg/kg	5	n.d.
Dibromobiphenyl	mg/kg	5	n.d.
Tribromobiphenyl	mg/kg	5	n.d.
Tetrabromobiphenyl	mg/kg	5	n.d.
Pentabromobiphenyl	mg/kg	5	n.d.
Hexabromobiphenyl	mg/kg	5	n.d.
Heptabromobiphenyl	mg/kg	5	n.d.
Octabromobiphenyl	mg/kg	5	n.d.
Nonabromobiphenyl	mg/kg	5	n.d.
Decabromobiphenyl	mg/kg	5	n.d.
Sum of Polybrominated diphenyl ethers (PBDEs)	mg/kg	-	n.d.
Monobromodiphenyl ether	mg/kg	5	n.d.
Dibromodiphenyl ether	mg/kg	5	n.d.
Tribromodiphenyl ether	mg/kg	5	n.d.
Tetrabromodiphenyl ether	mg/kg	5	n.d.
Pentabromodiphenyl ether	mg/kg	5	n.d.
Hexabromodiphenyl ether	mg/kg	5	n.d.
Heptabromodiphenyl ether	mg/kg	5	n.d.
Octabromodiphenyl ether	mg/kg	5	n.d.
Nonabromodiphenyl ether	mg/kg	5	n.d.
Decabromodiphenyl ether	mg/kg	5	n.d.

Notes:
- n.d. - not detected
- LoD - Limit of Detection
- mg/kg is equal to ppm (parts per million)
- *Once the total Cr content in metal/ plastic or electronic sample is found to be exceeded the limit, the Cr (VI) content will be confirmed with reference to IEC 62321-7-1:2015/ IEC 62321-7-2:2017

	Cd	Cr(VI)	Pb	Hg	PBBs	PBDEs
Maximum permissible Limit acc. to 2011/65/EU (mg/kg)	100	1000	1000	1000	1000	1000

Test Report No. : 238113368m5 002 2020-01-10
Customer : Chi Mei Corporation
Test Method : BBP/DBP/DEHP/DIBP - Ref. to IEC 62321-8:2017
Halogen - Following EN 14582; determination by I.C.

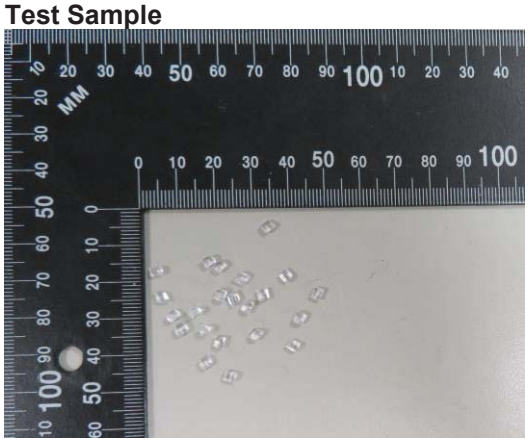
Sample Material Lab.-No.		LoD	WONDERLITE® PC-110U plastic/transparent TCL191209-107
Benzylbutylphthalate (BBP)	mg/kg	50	n.d.
Dibutylphthalate (DBP)	mg/kg	50	n.d.
Diethylhexylphthalate (DEHP)	mg/kg	50	n.d.
Diisobutylphthalate (DIBP)	mg/kg	50	n.d.

	BBP	**DBP**	**DEHP**	**DIBP**
Maximum permissible Limit acc. to (EU) 2015/863 (mg/kg)	1000	1000	1000	1000

Sample Material Lab.-No.		LoD	WONDERLITE® PC-110U plastic/transparent TCL191209-107
Halogen	**Unit**	**LoD**	**Result**
Fluorine (F)	mg/kg	50	n.d.
Chlorine (Cl)	mg/kg	50	n.d.
Bromine (Br)	mg/kg	50	n.d.
Iodine (I)	mg/kg	50	n.d.

Notes:
- n.d. - not detected
- n.a. - not applicable
- LoD - Limit of Detection
- mg/kg is equal to ppm (parts per million)

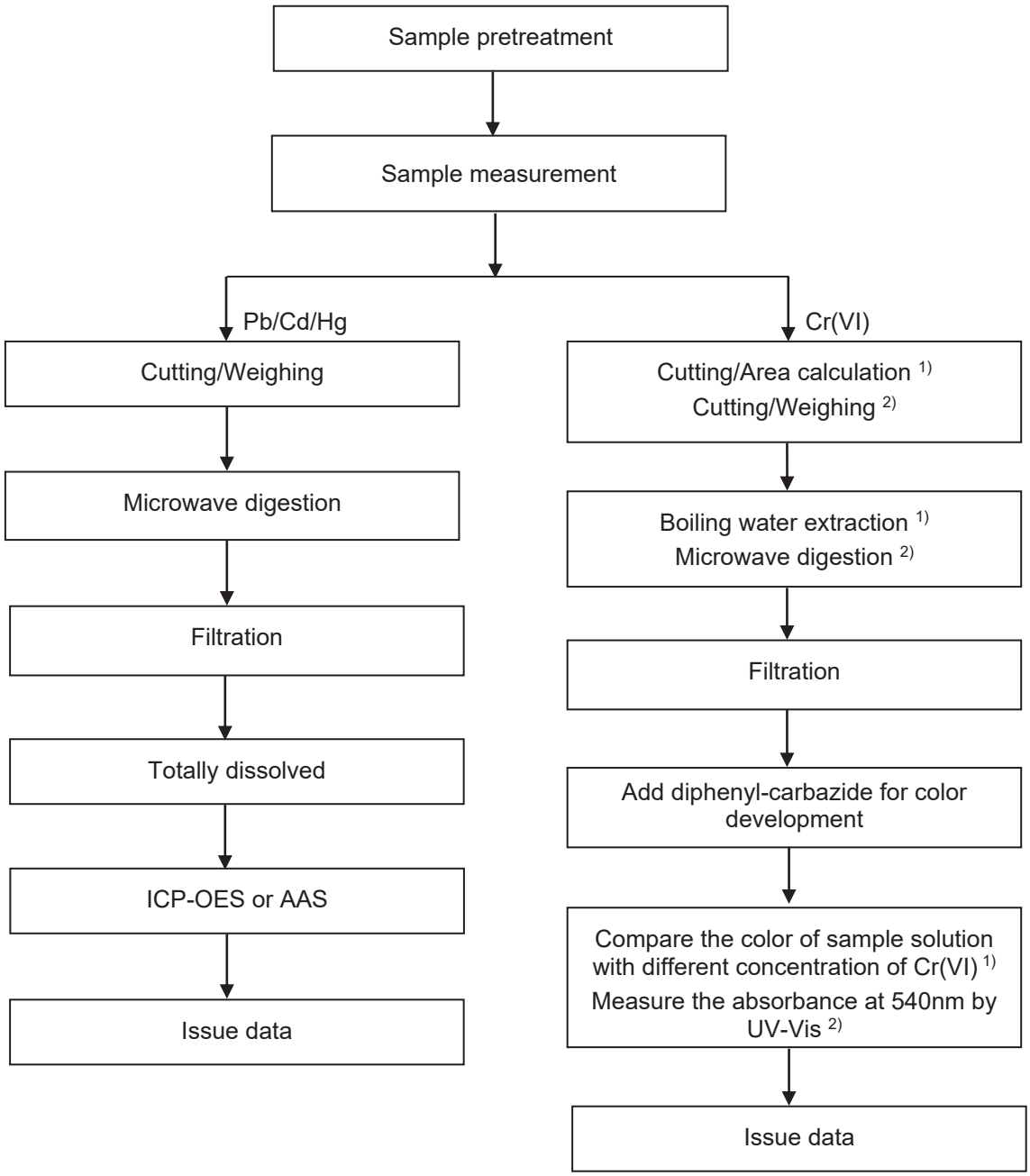
Test Sample



Test Report No. : 238113368m5 002 2020-01-10
Customer : Chi Mei Corporation

Testing procedure:

RoHS (Pb, Cd, Hg, Cr(VI))

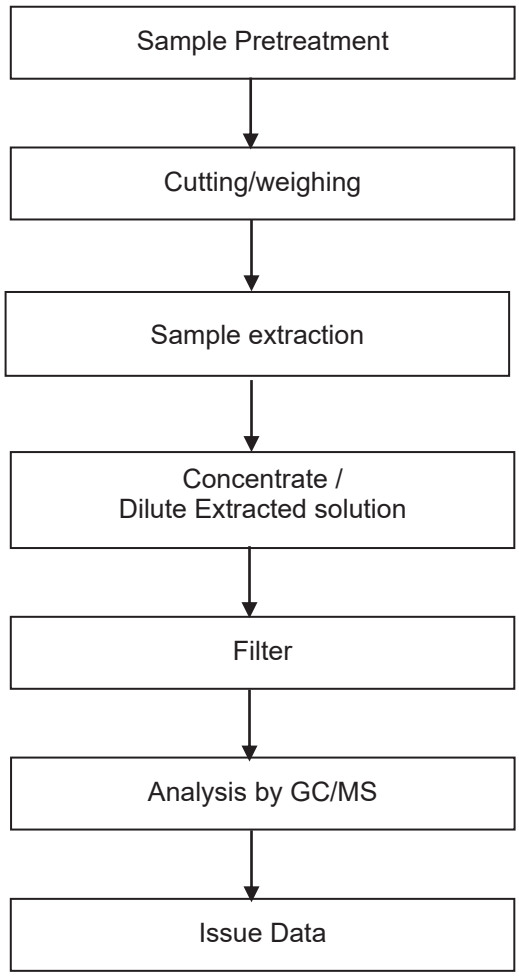


Notes: 1) For metallic material
2) For non-metallic material

Test Report No. : 238113368m5 002 2020-01-10
Customer : Chi Mei Corporation

Testing procedure:

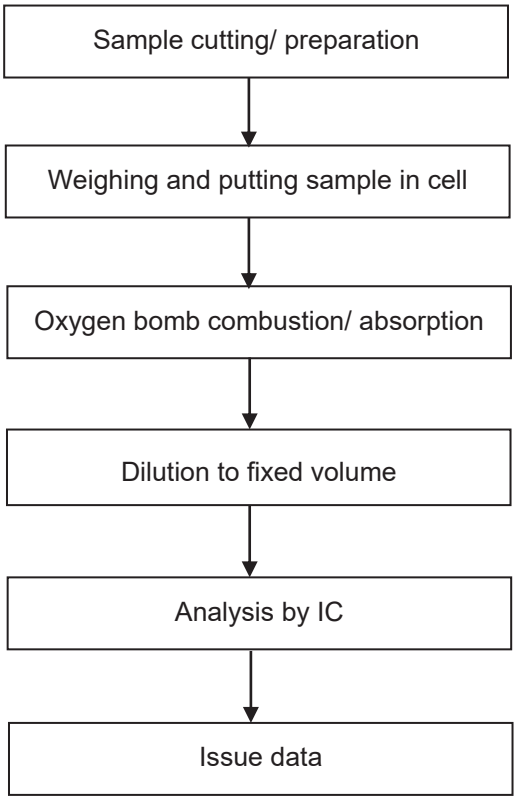
RoHS (PBBs/PBDEs, DEHP/DBP/BBP/DIBP)



Test Report No. : 238113368m5 002 2020-01-10
Customer : Chi Mei Corporation

Testing procedure:

Halogen



--- End of Test-Report ---