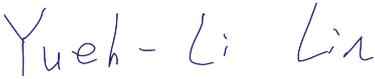


Prüfbericht - Nr.: 0238100012a 001		Seite 1 von 18	
<i>Test Report No.:</i>		<i>Page 1 of 18</i>	
Auftraggeber: <i>Client:</i>	Formosa Chemicals & Fibre Corporation 201, Tung Hwa N. Rd., Taipei 105, Taiwan, R.O.C.		
Gegenstand der Prüfung: <i>Test Item:</i>	Acrylonitrile/Butadiene/Styrene Copolymers (ABS)		
Bezeichnung: <i>Identification:</i>	TAIRILAC ABS: AG12A0, AG12A1, AG12A3, AG15A0, AG15A1, AG15A1-H, AG15A2, AG15A3, AG15AM, AG15E0, AG15E1, AG15E3, AG15AB, AG15AJ, AG12AJ, AG1000, AG10AP, AF3500, AF3560, AF3600, AG22AT, AG23AT, AG10NP, AG10NP-T, AG10NP-H, AE8000, AE8200, ANC120, ANC100, AT5500, AX4000, AX4100, AX4300		
Anlieferungszustand: <i>Delivery condition:</i>	apparent good	Eingangsdatum: <i>Date of Receipt:</i>	2019-01-09, 2019-01-10
Prüfart: <i>Testing location:</i>	TÜV Rheinland (Shanghai) Co. Ltd.		
Prüfgrundlage: <i>Test specification:</i>	According to RoHS (recast): Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, 2011/65/EU last amended by (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)		
Prüfresultat: <i>Test result:</i>	According to the kind and extend of tests performed the above mentioned test item passed the test specification.		
geprüft: tested by:	kontrolliert: checked by:		
 Yueh-Li Lin		 Tammy Wang	
2019-01-24 Yueh-Li Lin /Senior Project Coordinator		2019-01-24 Tammy Wang /Assistant Manager	
Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>
Sonstiges/ Other Aspects:			
Test period: 2019-01-09 – 2019-01-23			
Abkürzungen:	ok / P = entspricht Prüfgrundlage	Abbreviations:	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. <i>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.</i>			



Test Report No. : 0238100012a 001
Customer : Formosa Chemicals & Fibre Corporation

2019-01-24

Sample list:

Mat. No.	Description	Material	Color	Location / Lab no.:
1	AG12A0	Plastic	Off white	TCL190109-06
2	AG12A1	Plastic	Off white	TCL190109-07
3	AG12A3	Plastic	Off white	TCL190109-08
4	AG15A0	Plastic	Off white	TCL190109-09
5	AG15A1	Plastic	Off white	TCL190109-10
6	AG15A1-H	Plastic	Off white	TCL190109-11
7	AG15A2	Plastic	Off white	TCL190109-12
8	AG15A3	Plastic	Off white	TCL190109-13
9	AG15AM	Plastic	Off white	TCL190109-14
10	AG15E0	Plastic	Off white	TCL190109-15
11	AG15E1	Plastic	Off white	TCL190109-16
12	AG15E3	Plastic	Off white	TCL190109-17
13	AG15AB	Plastic	Black	TCL190109-18
14	AG15AJ	Plastic	Black	TCL190109-19
15	AG12AJ	Plastic	Black	TCL190109-20
16	AG1000	Plastic	Off white	TCL190109-21
17	AG10AP	Plastic	Off white	TCL190109-22
18	AF3500	Plastic	Off white	TCL190109-23
19	AF3560	Plastic	Off white	TCL190109-24
20	AG22AT	Plastic	Off white	TCL190109-25
21	AG23AT	Plastic	Off white	TCL190109-26
22	AG10NP	Plastic	Off white	TCL190109-27
23	AG10NP-T	Plastic	Off white	TCL190109-28
24	AG10NP-H	Plastic	Off white	TCL190109-29
25	AE8000	Plastic	Off white	TCL190109-30
26	ANC120	Plastic	Off white	TCL190109-31
27	ANC100	Plastic	Off white	TCL190109-32
28	AT5500	Plastic	Transparent	TCL190109-33
29	AX4000	Plastic	Off white	TCL190109-34
30	AX4100	Plastic	Off white	TCL190109-35
31	AX4300	Plastic	Off white	TCL190109-36
32	AF3600	Plastic	Off white	TCL190110-12
33	AE8200	Plastic	Off white	TCL190110-13



Test Report No. : 0238100012a 001 2019-01-24
 Customer : Formosa Chemicals & Fibre 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 No.	LoD	1	2	3	4
Cadmium (Cd) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Lead (Pb) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Mercury (Hg) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Chromium VI (Cr VI)* mg/kg	10	n.d.	n.d.	n.d.	n.d.
Sum of Polybrominated biphenyls (PBBs) mg/kg	-	n.d.	n.d.	n.d.	n.d.
Monobromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Dibromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tribromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tetrabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Pentabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Hexabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Heptabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Octabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Nonabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Decabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Sum of Polybrominated diphenyl ethers (PBDEs) mg/kg	-	n.d.	n.d.	n.d.	n.d.
Monobromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Dibromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tribromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tetrabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Pentabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Hexabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Heptabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Octabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Nonabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Decabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.

Notes:

- n.d. - not detected
- n.a. - not applicable
- 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



Test Report No. : 0238100012a 001 2019-01-24
 Customer : Formosa Chemicals & Fibre 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 No.	LoD	5	6	7	8
Cadmium (Cd) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Lead (Pb) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Mercury (Hg) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Chromium VI (Cr VI)* mg/kg	10	n.d.	n.d.	n.d.	n.d.
Sum of Polybrominated biphenyls (PBBs) mg/kg	-	n.d.	n.d.	n.d.	n.d.
Monobromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Dibromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tribromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tetrabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Pentabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Hexabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Heptabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Octabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Nonabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Decabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Sum of Polybrominated diphenyl ethers (PBDEs) mg/kg	-	n.d.	n.d.	n.d.	n.d.
Monobromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Dibromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tribromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tetrabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Pentabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Hexabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Heptabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Octabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Nonabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Decabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.

Notes:

- n.d. - not detected
- n.a. - not applicable
- 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



Test Report No. : 0238100012a 001 2019-01-24
 Customer : Formosa Chemicals & Fibre 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 No.	LoD	9	10	11	12
Cadmium (Cd) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Lead (Pb) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Mercury (Hg) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Chromium VI (Cr VI)* mg/kg	10	n.d.	n.d.	n.d.	n.d.
Sum of Polybrominated biphenyls (PBBs) mg/kg	-	n.d.	n.d.	n.d.	n.d.
Monobromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Dibromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tribromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tetrabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Pentabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Hexabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Heptabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Octabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Nonabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Decabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Sum of Polybrominated diphenyl ethers (PBDEs) mg/kg	-	n.d.	n.d.	n.d.	n.d.
Monobromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Dibromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tribromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tetrabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Pentabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Hexabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Heptabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Octabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Nonabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Decabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.

Notes:

- n.d. - not detected
- n.a. - not applicable
- 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



Test Report No. : 0238100012a 001 2019-01-24
 Customer : Formosa Chemicals & Fibre 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 No.		LoD	13	14	15	16
Cadmium (Cd)	mg/kg	2	n.d.	n.d.	n.d.	n.d.
Lead (Pb)	mg/kg	2	n.d.	n.d.	n.d.	n.d.
Mercury (Hg)	mg/kg	2	n.d.	n.d.	n.d.	n.d.
Chromium VI (Cr VI)*	mg/kg	10	n.d.	n.d.	n.d.	n.d.
Sum of Polybrominated biphenyls (PBBs)	mg/kg	-	n.d.	n.d.	n.d.	n.d.
Monobromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Dibromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tribromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tetrabromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Pentabromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Hexabromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Heptabromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Octabromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Nonabromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Decabromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Sum of Polybrominated diphenyl ethers (PBDEs)	mg/kg	-	n.d.	n.d.	n.d.	n.d.
Monobromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Dibromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tribromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tetrabromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Pentabromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Hexabromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Heptabromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Octabromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Nonabromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Decabromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.

Notes:

- n.d. - not detected
- n.a. - not applicable
- 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



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 - 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 No.	LoD	17	18	19	20
Cadmium (Cd) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Lead (Pb) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Mercury (Hg) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Chromium VI (Cr VI)* mg/kg	10	n.d.	n.d.	n.d.	n.d.
Sum of Polybrominated biphenyls (PBBs) mg/kg	-	n.d.	n.d.	n.d.	n.d.
Monobromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Dibromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tribromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tetrabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Pentabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Hexabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Heptabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Octabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Nonabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Decabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Sum of Polybrominated diphenyl ethers (PBDEs) mg/kg	-	n.d.	n.d.	n.d.	n.d.
Monobromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Dibromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tribromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tetrabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Pentabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Hexabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Heptabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Octabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Nonabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Decabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.

Notes:

- n.d. - not detected
- n.a. - not applicable
- 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



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 - Ref. to IEC 62321-4:2013 and IEC 62321-5:2013
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 - 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 No.	LoD	21	22	23	24
Cadmium (Cd) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Lead (Pb) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Mercury (Hg) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Chromium VI (Cr VI)* mg/kg	10	n.d.	n.d.	n.d.	n.d.
Sum of Polybrominated biphenyls (PBBs) mg/kg	-	n.d.	n.d.	n.d.	n.d.
Monobromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Dibromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tribromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tetrabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Pentabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Hexabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Heptabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Octabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Nonabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Decabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Sum of Polybrominated diphenyl ethers (PBDEs) mg/kg	-	n.d.	n.d.	n.d.	n.d.
Monobromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Dibromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tribromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tetrabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Pentabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Hexabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Heptabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Octabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Nonabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Decabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.

Notes:

- n.d. - not detected
- n.a. - not applicable
- 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



Test Report No. : 0238100012a 001 2019-01-24
 Customer : Formosa Chemicals & Fibre 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 No.	LoD	25	26	27	28
Cadmium (Cd) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Lead (Pb) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Mercury (Hg) mg/kg	2	n.d.	n.d.	n.d.	n.d.
Chromium VI (Cr VI)* mg/kg	10	n.d.	n.d.	n.d.	n.d.
Sum of Polybrominated biphenyls (PBBs) mg/kg	-	n.d.	n.d.	n.d.	n.d.
Monobromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Dibromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tribromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tetrabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Pentabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Hexabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Heptabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Octabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Nonabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Decabromobiphenyl mg/kg	5	n.d.	n.d.	n.d.	n.d.
Sum of Polybrominated diphenyl ethers (PBDEs) mg/kg	-	n.d.	n.d.	n.d.	n.d.
Monobromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Dibromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tribromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tetrabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Pentabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Hexabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Heptabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Octabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Nonabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.
Decabromodiphenyl ether mg/kg	5	n.d.	n.d.	n.d.	n.d.

Notes:

- n.d. - not detected
- n.a. - not applicable
- 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



Test Report No. : 0238100012a 001 2019-01-24
 Customer : Formosa Chemicals & Fibre 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 No.		LoD	29	30	31	32
Cadmium (Cd)	mg/kg	2	n.d.	n.d.	n.d.	n.d.
Lead (Pb)	mg/kg	2	n.d.	n.d.	n.d.	n.d.
Mercury (Hg)	mg/kg	2	n.d.	n.d.	n.d.	n.d.
Chromium VI (Cr VI)*	mg/kg	10	n.d.	n.d.	n.d.	n.d.
Sum of Polybrominated biphenyls (PBBs)	mg/kg	-	n.d.	n.d.	n.d.	n.d.
Monobromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Dibromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tribromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tetrabromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Pentabromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Hexabromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Heptabromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Octabromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Nonabromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Decabromobiphenyl	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Sum of Polybrominated diphenyl ethers (PBDEs)	mg/kg	-	n.d.	n.d.	n.d.	n.d.
Monobromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Dibromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tribromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Tetrabromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Pentabromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Hexabromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Heptabromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Octabromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Nonabromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.
Decabromodiphenyl ether	mg/kg	5	n.d.	n.d.	n.d.	n.d.

Notes:

- n.d. - not detected
- n.a. - not applicable
- 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



Test Report No. : 0238100012a 001
 Customer : Formosa Chemicals & Fibre 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

2019-01-24

Sample/Material No.		LoD	33
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	10	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
- n.a. - not applicable
- 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. : 0238100012a 001
 Customer : Formosa Chemicals & Fibre Corporation
 Test Method : BBP/DBP/DEHP/DIBP - Ref. to IEC 62321-8:2017

2019-01-24

Sample/Material No.	LoD	1	2	3	4
Benzylbutylphthalate (BBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Dibutylphthalate (DBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Diethylhexylphthalate (DEHP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Diisobutylphthalate (DIBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.

Sample/Material No.	LoD	5	6	7	8
Benzylbutylphthalate (BBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Dibutylphthalate (DBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Diethylhexylphthalate (DEHP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Diisobutylphthalate (DIBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.

Sample/Material No.	LoD	9	10	11	12
Benzylbutylphthalate (BBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Dibutylphthalate (DBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Diethylhexylphthalate (DEHP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Diisobutylphthalate (DIBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.

Sample/Material No.	LoD	13	14	15	16
Benzylbutylphthalate (BBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Dibutylphthalate (DBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Diethylhexylphthalate (DEHP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Diisobutylphthalate (DIBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.

Sample/Material No.	LoD	17	18	19	20
Benzylbutylphthalate (BBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Dibutylphthalate (DBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Diethylhexylphthalate (DEHP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Diisobutylphthalate (DIBP) mg/kg	50	n.d.	n.d.	n.d.	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 Report No. : 0238100012a 001
 Customer : Formosa Chemicals & Fibre Corporation
 Test Method : BBP/DBP/DEHP/DIBP - Ref. to IEC 62321-8:2017

2019-01-24

Sample/Material No.	LoD	21	22	23	24
Benzylbutylphthalate (BBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Dibutylphthalate (DBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Diethylhexylphthalate (DEHP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Diisobutylphthalate (DIBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.

Sample/Material No.	LoD	25	26	27	28
Benzylbutylphthalate (BBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Dibutylphthalate (DBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Diethylhexylphthalate (DEHP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Diisobutylphthalate (DIBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.

Sample/Material No.	LoD	29	30	31	32
Benzylbutylphthalate (BBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Dibutylphthalate (DBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Diethylhexylphthalate (DEHP) mg/kg	50	n.d.	n.d.	n.d.	n.d.
Diisobutylphthalate (DIBP) mg/kg	50	n.d.	n.d.	n.d.	n.d.

Sample/Material No.	LoD	33
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.

Notes:

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

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



Test Report No. : 0238100012a 001
Customer : Formosa Chemicals & Fibre Corporation

2019-01-24

Test Sample



1



2



3



4



5



6



7



8



9



10



11



12



Test Report No. : 0238100012a 001
Customer : Formosa Chemicals & Fibre Corporation

2019-01-24



13



14



15



16



17



18



19



20



21



22



23



24

Test Report No. : 0238100012a 001
Customer : Formosa Chemicals & Fibre Corporation

2019-01-24



25



26



27



28



29



30



31



32



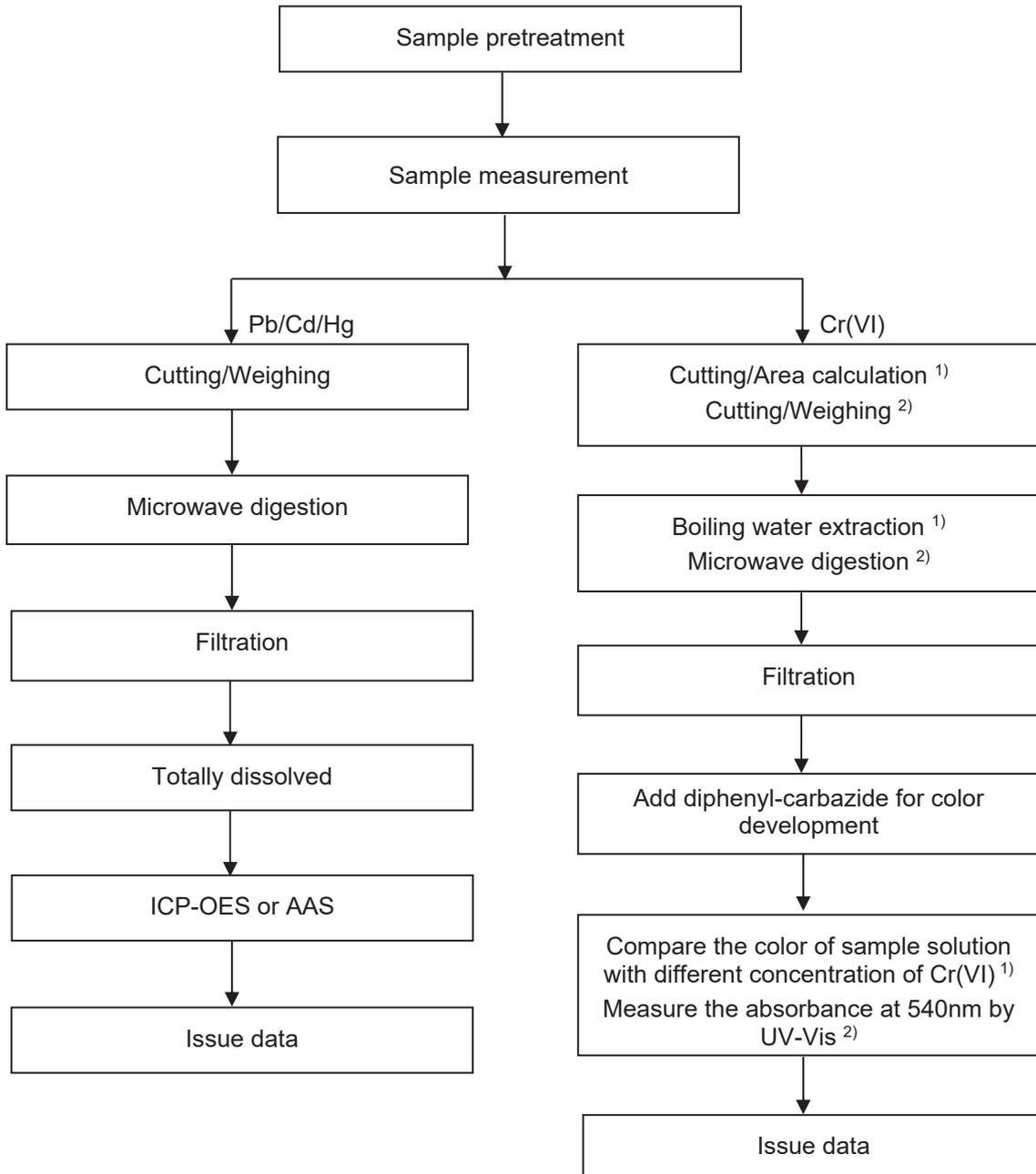
33

Test Report No. : 0238100012a 001
 Customer : Formosa Chemicals & Fibre Corporation

2019-01-24

Testing procedure:

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



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

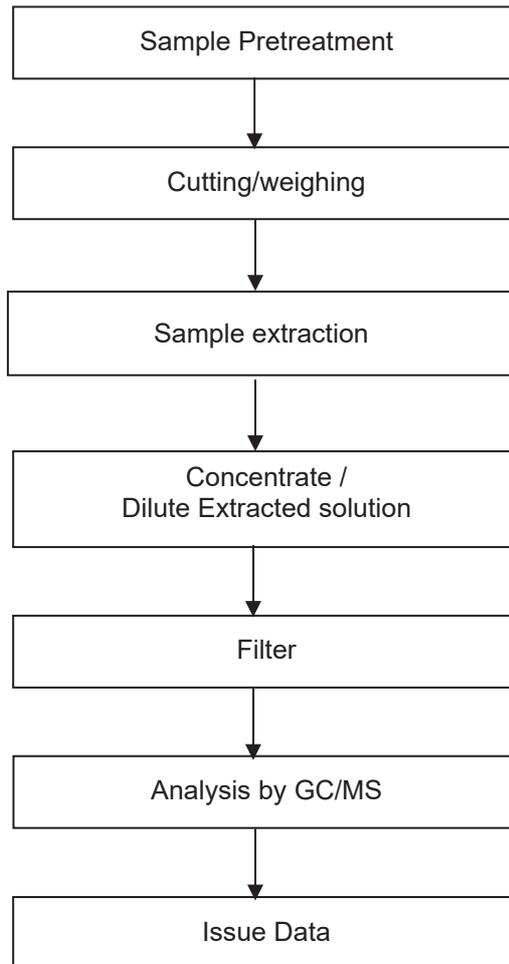


Test Report No. : 0238100012a 001
Customer : Formosa Chemicals & Fibre Corporation

2019-01-24

Testing procedure:

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



--- End of Test-Report ---

