

Test Report

Report No. : AGC05443230815-001S2

- SAMPLE NAME : Tritan sport bottle
- MODEL NAME : MO9227
- APPLICANT : MID OCEAN BRANDS B.V
- **STANDARD(S)** : Please refer to the following page(s).
- DATE OF ISSUE : Apr. 17, 2024

Attestation of Global Complance (Shenzhen) Std & Tech Co., Ltd.







: MID OCEAN BRANDS B.V

: 7/F, Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.

: 6/F., Building 2, Sanwei Chaxi Industrial Park, Sanwei Community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China

Report on the submitted sample(s) said to be:

Sample Name	:	Tritan sport bottle
Model	:	MO9227
Vendor code	:	113089
Country of Origin	:	CHINA
Country of Destination	:	EUROPE
Sample receiving state	:	Normal
Sample Received Date	:	Aug. 15, 2023(Test point:1-1 to 1-9)
		Apr. 07, 2024(Test point:1-10)
Testing Period	:	Aug. 15, 2023 to Aug. 21, 2023(Test point:1-1 to 1-9)
Test Deswested		Apr. 07, 2024 to Apr. 09, 2024(Test point:1-10)
Test Requested	:	Selected test(s) as requested by client.

Approved by:

Suhongliang, Leon Technical Director

Test Requested:	Report No.: AGC05443230815-001S2 Conclusion
Mechanical dishwashing safe test	Pass
Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 63 - Lead(Pb) Content	Pass
Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 23 -Cadmium(Cd) Content	Pass
Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 50 - Polycyclic-aromatic Hydrocarbons (PAHs) Content	Pass
Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 51&52 - Phthalates Content	Pass
Regulation 1935/2004/EC, Regulation(EU) No 10/2011 and its amendment Regu 2020/1245 and Regulation (EU) 2018/213 and Council of Europe Resolution AP	
- Overall migration	Pass
- Bisphenol A(BPA) content	Pass
- Specific migration of Bisphenol A(BPA)	Pass
- Specific migration of Primary aromatic amines	Pass
- Specific migration of Heavy metals	Pass
DM-4B-COM-003-v01	
-Volatile Organic Matter	Pass
- Peroxide value	Pass
- Specific Migration of Organotin (measured as Tin)	Pass

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Report Version	Issued Date	Valid Version	Notes						
/	Aug. 23, 2023	Invalid	Initial release						
S1	Apr. 15, 2024	Invalid	Add test						
S2	Apr. 17, 2024	Valid	Modification of sample name & model & vendor code						

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The photo of the sample





The photo of AGC05443230815-001S2 is for use only with the original report.

Test Point Description

Test point	Test point description
1-1	Red plastic bottle body(Tritan)+Red plastic lid((PP)
1-2	Red plastic suction nozzle(PS)+Transparent plastic straw(PE)
1-3	Transparent silicone plug + silicone ring
1-4	Metal shell
1-5	Red plastic bottle body(Tritan)
1-6	Red plastic lid((PP)
1-7	Red plastic suction nozzle(PS)
1-8	Transparent plastic straw(PE)
1-9	Transparent silicone ring
1-10	Transparent silicone ring



Note: N.D.=Not Detected (less than method detection limit), MDL = Method Detection Limit, 1mg/kg=0.0001%

Mechanical dishwashing safe test

Test Result of mechanical dishwashing safe test:
Requirements:For dishwasher safe test, if there is no noticeable change in appearance (e.g. color, size and shape) and
function, it should be "PASS",
Sample No.:MO9227 (red)
Test method: Refer BS EN 12875 -1-2005
Washing temperature: 60°C
Number of cycle: 10 cycles
Number of tested sample: $1 \text{ pc}(s)$.
Number of control sample: 1 pc(s).
For all tested plastic or metal articles:
No visible change of color, gloss and clouding was found on the tested samples after wash.
No visible deposit or iridescent layer was found on the tested samples after wash.
No visible swelling, deformation, cracking, crazing or delamination was found on the tested samples after wash.

Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 63

- Lead(Pb) Content

Test Methods and Equipment: IEC 62321-5:2013; ICP-OES

Test Item (s)	Unit Limit	Limit	MDL	Test Result(s)		
Test Item(s)	Unit	Liiiit	WIDL	1-1	1-2	
Lead(Pb)	mg/kg	500	10	N.D.	N.D.	
Co	Conformity	Conformity				

Test Item(s)	Unit Limit	MDI	Test Result(s)		
Test tieth(s)	Unit	t Limit MDL		1-3	1-4
Lead(Pb)	mg/kg	500	10	N.D.	N.D.
Conclusion				Conformity	Conformity

Test Item(s)	Unit	Limit	MDL	Test Result(s) 1-10
Lead(Pb)	mg/kg	500	10	N.D.
Со	nclusion			Conformity

Remark:

1. As specified by client, the submitted samples were mixed to test, the test points: 1-1,1-2,1-3



Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 23

-Cadmium(Cd) Content

Test Methods and Equipment: IEC 62321-5:2013; ICP-OES

Test Item(s)	Unit Limit	MDI	Test Result(s)			
Test Item(s)	Unit	Limit MDL		1-1	1-2	1-3
Cadmium(Cd)	mg/kg	100	10	N.D.	N.D.	N.D.
Conclusion			Conformity	Conformity	Conformity	

Test Item(s)	Unit Limit		MDL	Test Result(s)
Test Item(s)	Unit	Limit	WIDL	1-10
Cadmium(Cd)	mg/kg	100	10	N.D.
Co	nclusion			Conformity

Remark:

1. As specified by client, the submitted samples were mixed to test, the test points: 1-1,1-2,1-3

Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 50

- Polycyclic-aromatic Hydrocarbons (PAHs) Content

Test Methods and Equipment: Afps GS 2019:01 PAK; GC-MS

Test Item(s)	Unit	Limit	MDL	Test Result(s)			
Test Item(s)	Om	LIIIII	MDL	1-1	1-2	1-3	
Benzo[a]pyrene(BaP)	mg/kg	1	0.1	N.D.	N.D.	N.D.	
Benzo[e]pyrene(BeP)	mg/kg	1	0.1	N.D.	N.D.	N.D.	
Benzo[a]anthracene(BaA)	mg/kg	1	0.1	N.D.	N.D.	N.D.	
Benzo[b]fluoranthene(BbF)	mg/kg	1	0.1	N.D.	N.D.	N.D.	
Benzo[j]fluoranthene(BjFA)	mg/kg	1	0.1	N.D.	N.D.	N.D.	
Benzo[k]fluoranthene(BkF)	mg/kg	1	0.1	N.D.	N.D.	N.D.	
Chrysene(CHR)	mg/kg	1	0.1	N.D.	N.D.	N.D.	
Dibenzo[a,h]anthracene(DBA)	mg/kg	1	0.1	N.D.	N.D.	N.D.	
Con	clusion			Conformity	Conformity	Conformity	

Test Item(s)	Unit	Limit	MDL	Test Result(s) 1-10
Benzo[a]pyrene(BaP)	mg/kg	1	0.1	N.D.
Benzo[e]pyrene(BeP)	mg/kg	1	0.1	N.D.
Benzo[a]anthracene(BaA)	mg/kg	1	0.1	N.D.
Benzo[b]fluoranthene(BbF)	mg/kg	1	0.1	N.D.
Benzo[j]fluoranthene(BjFA)	mg/kg	1	0.1	N.D.
Benzo[k]fluoranthene(BkF)	mg/kg	1	0.1	N.D.
Chrysene(CHR)	mg/kg	1	0.1	N.D.
Dibenzo[a,h]anthracene(DBA)	mg/kg	1	0.1	N.D.
C	onclusion			Conformity

Remark:

1. As specified by client, the submitted samples were mixed to test, the test points: 1-1,1-2,1-3

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Report No.: AGC05443230815-001S2 Limit requirements of Polycyclic-aromatic Hydrocarbons (PAHs) (Unit: mg/kg)

Items	CAS No.	Extender oils or used for the production of tyres or parts of tyres	Any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity	Toys, including activity toys, and childcare articles, any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity
Benzo[a]pyrene(BaP)	50-32-8	≤ 1	≤ 1	≤ 0.5
Benzo[e]pyrene(BeP)	192-97-2	/	≤ 1	≤ 0.5
Benzo[a]anthracene(BaA)	56-55-3	/	≤ 1	≤ 0.5
Benzo[b]fluoranthene(BbF)	205-99-2	/	≤ 1	≤ 0.5
Benzo[j]fluoranthene(BjFA)	205-82-3	/	≤ 1	≤ 0.5
Benzo[k]fluoranthene(BkF)	207-08-9	/	≤ 1	≤ 0.5
Chrysene(CHR)	218-01-9	/	≤ 1	≤ 0.5
Dibenzo[a,h]anthracene(DBA)	53-70-3	/	≤ 1	≤ 0.5
Sum of BaP+ BeP+ BaA+ BbF+ BjFA+ BkF+ CHR+ DBA	/	≤ 10	/	/

Annex XVII of the REACH Regulation (EC) No 1907/2006, entry 51&52

- Phthalates Content

Test Methods and Equipment: IEC 62321-8:2017; GC-MS

Test Item(s)	Unit	Limit MDL	Test Result(s)			
Test tieni(s)	Unit	LIIIII	WIDL	1-1	1-2	1-3
Diisobutyl phthalate (DIBP) CAS:84-69-5	%	0.1	0.005	N.D.	N.D.	N.D.
Dibutyl phthalate (DBP) CAS:84-74-2	%	0.1	0.005	N.D.	N.D.	N.D.
Butylbenzyl phthalate (BBP) CAS:85-68-7	%	0.1	0.005	N.D.	N.D.	N.D.
Di-(2-ethylhexyl) Phthalate (DEHP) CAS:117-81-7	%	0.1	0.005	N.D.	N.D.	N.D.
Di-n-octyl phthalate (DNOP) CAS:117-84-0	%	/	0.005	N.D.	N.D.	N.D.
Di-isononyl phthalate (DINP) CAS:28553-12-0, 68515-48-0	%	/	0.005	N.D.	N.D.	N.D.
Di-isodecyl phthalate(DIDP) CAS:26761-40-0, 68515-49-1	%	/	0.005	N.D.	N.D.	N.D.
Sum of DIBP +DBP+BBP+DEHP	%	0.1	/	N.D.	N.D.	N.D.
Sum of DNOP+DINP+DIDP	%	0.1	/	N.D.	N.D.	N.D.
Conclusion				Conformity	Conformity	Conformity



Test Item(s)	Unit	Limit	MDL	Test Result(s) 1-10
Diisobutyl phthalate (DIBP) CAS:84-69-5	%	0.1	0.005	N.D.
Dibutyl phthalate (DBP) CAS:84-74-2	%	0.1	0.005	N.D.
Butylbenzyl phthalate (BBP) CAS:85-68-7	%	0.1	0.005	N.D.
Di-(2-ethylhexyl) Phthalate (DEHP) CAS:117-81-7	%	0.1	0.005	N.D.
Di-n-octyl phthalate (DNOP) CAS:117-84-0	%	/	0.005	N.D.
Di-isononyl phthalate (DINP) CAS:28553-12-0, 68515-48-0	%	/	0.005	N.D.
Di-isodecyl phthalate(DIDP) CAS:26761-40-0, 68515-49-1	%	/	0.005	N.D.
Sum of DIBP +DBP+BBP+DEHP	%	0.1	/	N.D.
Sum of DNOP+DINP+DIDP	%	0.1	/	N.D.
Со	nclusion			Conformity

Remark:

1. As specified by client, the submitted samples were mixed to test, the test points: 1-1,1-2,1-3

Limit requirements of Phthalates

Toys and childcare articles	Each of DEHP, DBP, BBP, DIBP is less than 0.1% or the sum of DEHP+DBP+BBP+DIBP is less than 0.1%
Toys and childcare articles which can be placed in the mouth by children	The sum of DINP+DIDP+DNOP is less than 0.1%

- Overall Migration

		Test R	Result	
Test point		Overall migrat	Conclusion	
		3% Acetic acid, 70°C,2h	50% Ethanol, 70°C,2h	
	1 st migration	5.1	N.D.	Conformity
1-5	2 nd migration	N.D.	N.D.	Conformity
	3 rd migration	N.D.	N.D.	Conformity
	1 st migration	N.D.	N.D.	Conformity
1-6	2 nd migration	N.D.	N.D.	Conformity
	3 rd migration	N.D.	N.D.	Conformity



		Test R	Result		
Test	point	Overall migrat	ion/ (mg/dm ²)	Conclusion	
		3% Acetic acid, 70°C,2h	50% Ethanol, 70°C,2h		
	1 st migration	N.D.	N.D.	Conformity	
1-7	2 nd migration	N.D.	N.D.	Conformity	
	3 rd migration	N.D.	N.D.	Conformity	
	1 st migration	N.D.	N.D.	Conformity	
1-8	2 nd migration	N.D.	N.D.	Conformity	
	3 rd migration	N.D.	N.D.	Conformity	
Li	mit	10	10	/	
Μ	DL	5	5	/	

	Test I	Result		
Test point	Overall migra	Overall migration/ (mg/dm ²)		
	3% Acetic acid, 70°C,2h	50% Ethanol, 70°C,2h		
1-9	N.D.	N.D.	Conformity	
1-10	N.D.	N.D.	Conformity	
Limit	10	10	/	
MDL	5	5	/	

- Bisphenol A(BPA) content

Test Item	Bisphenol A (BPA)
Limit (mg/kg)	Absent
MDL(mg/kg)	0.1
Test Method/ Instrument	EPA 3540C:1996& EPA 8321B:2007/ LC-MS-MS

Test point	Test Result (mg/kg)	Conclusion
Test point	Bisphenol A (BPA)	Conclusion
1-5	N.D.	Conformity
1-6	N.D.	Conformity
1-7	N.D.	Conformity

AGC	Report No.: AGC05	443230815-00182
Test point	Test Result (mg/kg)	Condusion
Test point	Bisphenol A (BPA)	Conclusion
1-8	N.D.	Conformity

Test Item	Bisphenol A (BPA)
Limit(Client's Requirement) (mg/kg)	Absent
MDL(mg/kg)	0.1
Test Method/ Instrument	EPA 3540C:1996& EPA 8321B:2007/ LC-MS-MS

Test point	Test Result (mg/kg)	Conclusion
Test point	Bisphenol A (BPA)	Conclusion
1-9	N.D.	Conformity
1-10	N.D.	Conformity

- Specific migration of Bisphenol A(BPA)

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Test point		Test Result	-
		Test pointSpecific migration of Bisphenol A(BPA)/ (mg/kg)	
		3% Acetic acid, 70°C,2h	
	1 st migration	N.D.	Conformity
1-5	2 nd migration	N.D.	Conformity
	3 rd migration	N.D.	Conformity
I	_imit	0.05	/
Ν	MDL	0.02	/

	Test Result	
Test point	Specific migration of Bisphenol A(BPA)/ (mg/kg)	Conclusion
	3% Acetic acid, 70°C,2h	
1-9	N.D.	Conformity
1-10	N.D.	Conformity
Limit(Client's Requirement)	0.05	/
MDL	0.02	/



Benzidine 0.002 N.D. 4-Chloro-o-Toluidine 0.002 N.D. 2-Naphthylamine 0.002 N.D. 4-amino-2',3-dimethylazobenzene 0.002 N.D. 5-Nitro-o-toluidine 0.002 N.D. 4-amino-2',3-dimethylazobenzene 0.002 N.D. 5-Nitro-o-toluidine 0.002 N.D. 4-Chloroaniline 0.002 N.D. 4-Methoxy-m-phenylenediamine 0.002 N.D. 3,3'-Dichlorobenzidine 0.002 N.D. 3,3'-Dimethoxybenzidine 0.002 N.D. 3,3'-Dimethybenzidine 0.002 N.D. 4,4'-Methylenedi-o-toluidine 0.002 N.D. 4,4'-Methylenedi-o-toluidine 0.002 N.D. 4,4'-Methylenebis[2-chloroaniline] 0.002 N.D. 4,4'-Oxydianiline 0.002 N.D. 4,4'-Thiodianiline 0.002 N.D. 2-Aminotoluene 0.002 N.D. 4,4'-Triiodianiline 0.002 N.D. 2,4,5-Trimethylaniline 0.002	Test Item(s)	MDL (mg/kg)	Limit (mg/kg)
4-Chloro-o-Toluidine 0.002 N.D. 2-Naphthylamine 0.002 N.D. 4-amino-2',3-dimethylazobenzene 0.002 N.D. 5-Nitro-o-toluidine 0.002 N.D. 4-Chloroaniline 0.002 N.D. 4-Chloroaniline 0.002 N.D. 4-Methoxy-m-phenylenediamine 0.002 N.D. 4,4'-Diaminodiphenylmethane 0.002 N.D. 3,3'-Dichlorobenzidine 0.002 N.D. 3,3'-Dimethybenzidine 0.002 N.D. 3,3'-Dimethybenzidine 0.002 N.D. 4,4'-Methylenedi-o-toluidine 0.002 N.D. 4,4'-Methylenedi-o-toluidine 0.002 N.D. 4,4'-Methylenebis[2-chloroaniline] 0.002 N.D. 4,4'-Oxydianiline 0.002 N.D. 4,4'-Thiodianiline 0.002 N.D. 2-Aminotoluene 0.002 N.D. 4,4'-Thiodianiline 0.002 N.D. 2,4,5-Trimethylaniline 0.002 N.D. 2-Methoxyaniline 0.002	4-Aminobiphenyl	0.002	N.D.
2-Naphthylamine 0.002 N.D. 4-amino-2',3-dimethylazobenzene 0.002 N.D. 5-Nitro-o-toluidine 0.002 N.D. 4-Chloroaniline 0.002 N.D. 4-Methoxy-m-phenylenediamine 0.002 N.D. 4.4'-Diaminodiphenylmethane 0.002 N.D. 3,3'-Dichlorobenzidine 0.002 N.D. 3,3'-Dimethoxybenzidine 0.002 N.D. 3,3'-Dimethybenzidine 0.002 N.D. 3,3'-Dimethybenzidine 0.002 N.D. 3,3'-Dimethybenzidine 0.002 N.D. 4,4'-Methylenedi-o-toluidine 0.002 N.D. 4,4'-Methylenedi-o-toluidine 0.002 N.D. 4,4'-Methylenedi-o-toluidine 0.002 N.D. 4,4'-Thiodianiline 0.002 N.D. 4,4'-Thiodianiline 0.002 N.D. 2-Aminotoluene 0.002 N.D. 2,4,5-Trimethylaniline 0.002 N.D. 2,4,5-Trimethylaniline 0.002 N.D. 2-Methoxyaniline 0.002	Benzidine	0.002	N.D.
4-amino-2',3-dimethylazobenzene0.002N.D.5-Nitro-o-toluidine0.002N.D.4-Chloroaniline0.002N.D.4-Methoxy-m-phenylenediamine0.002N.D.4,4'-Diaminodiphenylmethane0.002N.D.3,3'-Dichlorobenzidine0.002N.D.3,3'-Dimethoxybenzidine0.002N.D.3,3'-Dimethybenzidine0.002N.D.3,3'-Dimethybenzidine0.002N.D.4,4'-Methylenedi-o-toluidine0.002N.D.4,4'-Methylenedi-o-toluidine0.002N.D.4,4'-methylenebis[2-chloroaniline]0.002N.D.4,4'-Thiodianiline0.002N.D.2-Aminotoluene0.002N.D.4,4'-Trimethylaniline0.002N.D.2,4,5-Trimethylaniline0.002N.D.2,4-Shrine0.002N.D.1,3 phenylenediamine0.002N.D.1,3 phenylenediamine0.002N.D.1,3 phenylenediamine0.002N.D.1,3 phenylenediamine0.002N.D.	4-Chloro-o-Toluidine	0.002	N.D.
5-Nitro-o-toluidine0.002N.D.4-Chloroaniline0.002N.D.4-Methoxy-m-phenylenediamine0.002N.D.4.4'-Diaminodiphenylmethane0.002N.D.3,3'-Dichlorobenzidine0.002N.D.3,3'-Dimethoxybenzidine0.002N.D.3,3'-Dimethybenzidine0.002N.D.3,3'-Dimethybenzidine0.002N.D.4,4'-Methylenedi-o-toluidine0.002N.D.4,4'-Methylenedi-o-toluidine0.002N.D.6-methoxy-m-toluidine0.002N.D.4,4'-methylenebis[2-chloroaniline]0.002N.D.4,4'-Thiodianiline0.002N.D.2-Aminotoluene0.002N.D.2,4,5-Trimethylaniline0.002N.D.2,4,5-Trimethylaniline0.002N.D.1,3 phenylenediamine0.002N.D.1,3 phenylenediamine0.002N.D.1,3 phenylenediamine0.002N.D.	2-Naphthylamine	0.002	N.D.
4-Chloroaniline0.002N.D.4-Methoxy-m-phenylenediamine0.002N.D.4.4'-Diaminodiphenylmethane0.002N.D.3,3'-Dichlorobenzidine0.002N.D.3,3'-Dimethoxybenzidine0.002N.D.3,3'-Dimethybenzidine0.002N.D.3,3'-Dimethybenzidine0.002N.D.3,3'-Dimethybenzidine0.002N.D.4,4'-Methylenedi-o-toluidine0.002N.D.6-methoxy-m-toluidine0.002N.D.4,4'-Methylenebis[2-chloroaniline]0.002N.D.4,4'-Oxydianiline0.002N.D.2-Aminotoluene0.002N.D.2.4,5-Trimethylaniline0.002N.D.2.4,5-Trimethylaniline0.002N.D.1,3 phenylenediamine0.002N.D.1,3 phenylenediamine0.002N.D.1,3 phenylenediamine0.002N.D.	4-amino-2',3-dimethylazobenzene	0.002	N.D.
4-Methoxy-m-phenylenediamine0.002N.D.4.4'-Diaminodiphenylmethane0.002N.D.3,3'-Dichlorobenzidine0.002N.D.3,3'-Dimethoxybenzidine0.002N.D.3,3'-Dimethybenzidine0.002N.D.3,3'-Dimethybenzidine0.002N.D.4,4'-Methylenedi-o-toluidine0.002N.D.6-methoxy-m-toluidine0.002N.D.4,4'-methylenebis[2-chloroaniline]0.002N.D.4,4'-Thiodianiline0.002N.D.2-Aminotoluene0.002N.D.4-methyl-m-phenylenediamine0.002N.D.2,4,5-Trimethylaniline0.002N.D.2-Methoxyaniline0.002N.D.1,3 phenylenediamine0.002N.D.1,3 phenylenediamine0.002N.D.	5-Nitro-o-toluidine	0.002	N.D.
4,4'-Diaminodiphenylmethane0.002N.D.3,3'-Dichlorobenzidine0.002N.D.3,3'-Dimethoxybenzidine0.002N.D.3,3'-Dimethoxybenzidine0.002N.D.3,3'-Dimethybenzidine0.002N.D.4,4'-Methylenedi-o-toluidine0.002N.D.6-methoxy-m-toluidine0.002N.D.6-methoxy-m-toluidine0.002N.D.4,4'-methylenebis[2-chloroaniline]0.002N.D.4,4'-Thiodianiline0.002N.D.2-Aminotoluene0.002N.D.2,4,5-Trimethylaniline0.002N.D.2,4,5-Trimethylaniline0.002N.D.4-Aminoazobenzene0.002N.D.1,3 phenylenediamine0.002N.D.1,3 phenylenediamine0.002N.D.	4-Chloroaniline	0.002	N.D.
3,3'-Dichlorobenzidine0.002N.D.3,3'-Dimethoxybenzidine0.002N.D.3,3'-Dimethybenzidine0.002N.D.3,3'-Dimethybenzidine0.002N.D.4,4'-Methylenedi-o-toluidine0.002N.D.6-methoxy-m-toluidine0.002N.D.4,4'-methylenebis[2-chloroaniline]0.002N.D.4,4'-Oxydianiline0.002N.D.4,4'-Thiodianiline0.002N.D.2-Aminotoluene0.002N.D.4-methyl-m-phenylenediamine0.002N.D.2,4,5-Trimethylaniline0.002N.D.2-Methoxyaniline0.002N.D.1,3 phenylenediamine0.002N.D.1,3 phenylenediamine0.002N.D.	4-Methoxy-m-phenylenediamine	0.002	N.D.
3,3'-Dimethoxybenzidine0.002N.D.3,3'-Dimethybenzidine0.002N.D.4,4'-Methylenedi-o-toluidine0.002N.D.6-methoxy-m-toluidine0.002N.D.4,4'-methylenebis[2-chloroaniline]0.002N.D.4,4'-Oxydianiline0.002N.D.4,4'-Thiodianiline0.002N.D.2-Aminotoluene0.002N.D.2,4,5-Trimethylaniline0.002N.D.2,4,5-Trimethylaniline0.002N.D.2-Methoxyaniline0.002N.D.1,3 phenylenediamine0.002N.D.1,3 phenylenediamine0.002N.D.	4,4'-Diaminodiphenylmethane	0.002	N.D.
3,3'-Dimethybenzidine0.002N.D.4,4'-Methylenedi-o-toluidine0.002N.D.6-methoxy-m-toluidine0.002N.D.4,4'-methylenebis[2-chloroaniline]0.002N.D.4,4'-Oxydianiline0.002N.D.4,4'-Thiodianiline0.002N.D.2-Aminotoluene0.002N.D.4-methyl-m-phenylenediamine0.002N.D.2,4,5-Trimethylaniline0.002N.D.2-Methoxyaniline0.002N.D.1,3 phenylenediamine0.002N.D.1,3 phenylenediamine0.002N.D.	3,3'-Dichlorobenzidine	0.002	N.D.
4,4'-Methylenedi-o-toluidine0.002N.D.6-methoxy-m-toluidine0.002N.D.4,4'-methylenebis[2-chloroaniline]0.002N.D.4,4'-Oxydianiline0.002N.D.4,4'-Thiodianiline0.002N.D.2-Aminotoluene0.002N.D.4-methyl-m-phenylenediamine0.002N.D.2,4,5-Trimethylaniline0.002N.D.2-Methoxyaniline0.002N.D.1,3 phenylenediamine0.002N.D.1,3 phenylenediamine0.002N.D.	3,3'-Dimethoxybenzidine	0.002	N.D.
6-methoxy-m-toluidine0.002N.D.4,4'-methylenebis[2-chloroaniline]0.002N.D.4,4'-Oxydianiline0.002N.D.4,4'-Thiodianiline0.002N.D.2-Aminotoluene0.002N.D.4-methyl-m-phenylenediamine0.002N.D.2,4,5-Trimethylaniline0.002N.D.2-Methoxyaniline0.002N.D.1,3 phenylenediamine0.002N.D.	3,3'-Dimethybenzidine	0.002	N.D.
4,4'-methylenebis[2-chloroaniline]0.002N.D.4,4'-Oxydianiline0.002N.D.4,4'-Thiodianiline0.002N.D.2-Aminotoluene0.002N.D.4-methyl-m-phenylenediamine0.002N.D.2,4,5-Trimethylaniline0.002N.D.2-Methoxyaniline0.002N.D.1,3 phenylenediamine0.002N.D.	4,4'-Methylenedi-o-toluidine	0.002	N.D.
4,4'-Oxydianiline0.002N.D.4,4'-Thiodianiline0.002N.D.2-Aminotoluene0.002N.D.4-methyl-m-phenylenediamine0.002N.D.2,4,5-Trimethylaniline0.002N.D.2-Methoxyaniline0.002N.D.4-Aminoazobenzene0.002N.D.1,3 phenylenediamine0.002N.D.	6-methoxy-m-toluidine	0.002	N.D.
4,4'-Thiodianiline0.002N.D.2-Aminotoluene0.002N.D.4-methyl-m-phenylenediamine0.002N.D.2,4,5-Trimethylaniline0.002N.D.2-Methoxyaniline0.002N.D.4-Aminoazobenzene0.002N.D.1,3 phenylenediamine0.002N.D.	4,4'-methylenebis[2-chloroaniline]	0.002	N.D.
2-Aminotoluene0.002N.D.4-methyl-m-phenylenediamine0.002N.D.2,4,5-Trimethylaniline0.002N.D.2-Methoxyaniline0.002N.D.4-Aminoazobenzene0.002N.D.1,3 phenylenediamine0.002N.D.	4,4'-Oxydianiline	0.002	N.D.
4-methyl-m-phenylenediamine0.002N.D.2,4,5-Trimethylaniline0.002N.D.2-Methoxyaniline0.002N.D.4-Aminoazobenzene0.002N.D.1,3 phenylenediamine0.002N.D.	4,4'-Thiodianiline	0.002	N.D.
2,4,5-Trimethylaniline0.002N.D.2-Methoxyaniline0.002N.D.4-Aminoazobenzene0.002N.D.1,3 phenylenediamine0.002N.D.	2-Aminotoluene	0.002	N.D.
2-Methoxyaniline0.002N.D.4-Aminoazobenzene0.002N.D.1,3 phenylenediamine0.002N.D.	4-methyl-m-phenylenediamine	0.002	N.D.
4-Aminoazobenzene0.002N.D.1,3 phenylenediamine0.002N.D.	2,4,5-Trimethylaniline	0.002	N.D.
1,3 phenylenediamine 0.002 N.D.	2-Methoxyaniline	0.002	N.D.
	4-Aminoazobenzene	0.002	N.D.
Total of other primary aromatic amines0.010.01	1,3 phenylenediamine	0.002	N.D.
	Total of other primary aromatic amines	0.01	0.01



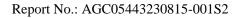
	Test Result (mg/kg)
Test Item(s)	1-5
	3% Acetic acid 70°C, 2h
4-Aminobiphenyl	N.D.
Benzidine	N.D.
4-Chloro-o-Toluidine	N.D.
2-Naphthylamine	N.D.
4-amino-2',3-dimethylazobenzene	N.D.
5-Nitro-o-toluidine	N.D.
4-Chloroaniline	N.D.
4-Methoxy-m-phenylenediamine	N.D.
4,4'-Diaminodiphenylmethane	N.D.
3,3'-Dichlorobenzidine	N.D.
3,3'-Dimethoxybenzidine	N.D.
3,3'-Dimethybenzidine	N.D.
4,4'-Methylenedi-o-toluidine	N.D.
6-methoxy-m-toluidine	N.D.
4,4'-methylenebis[2-chloroaniline]	N.D.
4,4'-Oxydianiline	N.D.
4,4'-Thiodianiline	N.D.
2-Aminotoluene	N.D.
4-methyl-m-phenylenediamine	N.D.
2,4,5-Trimethylaniline	N.D.
2-Methoxyaniline	N.D.
4-Aminoazobenzene	N.D.
1,3 phenylenediamine	N.D.
Total of other primary aromatic amines	N.D.
Conclusion	Conformity



	Test Result (mg/kg)	
Test Item(s)	1-6	
	3% Acetic acid 70°C, 2h	
4-Aminobiphenyl	N.D.	
Benzidine	N.D.	
4-Chloro-o-Toluidine	N.D.	
2-Naphthylamine	N.D.	
4-amino-2',3-dimethylazobenzene	N.D.	
5-Nitro-o-toluidine	N.D.	
4-Chloroaniline	N.D.	
4-Methoxy-m-phenylenediamine	N.D.	
4,4'-Diaminodiphenylmethane	N.D.	
3,3'-Dichlorobenzidine	N.D.	
3,3'-Dimethoxybenzidine	N.D.	
3,3'-Dimethybenzidine	N.D.	
4,4'-Methylenedi-o-toluidine	N.D.	
6-methoxy-m-toluidine	N.D.	
4,4'-methylenebis[2-chloroaniline]	N.D.	
4,4'-Oxydianiline	N.D.	
4,4'-Thiodianiline	N.D.	
2-Aminotoluene	N.D.	
4-methyl-m-phenylenediamine	N.D.	
2,4,5-Trimethylaniline	N.D.	
2-Methoxyaniline	N.D.	
4-Aminoazobenzene	N.D.	
1,3 phenylenediamine	N.D.	
Total of other primary aromatic amines	N.D.	
Conclusion	Conformity	



	Test Result (mg/kg)
Test Item(s)	1-7
	3% Acetic acid 70°C, 2h
4-Aminobiphenyl	N.D.
Benzidine	N.D.
4-Chloro-o-Toluidine	N.D.
2-Naphthylamine	N.D.
4-amino-2',3-dimethylazobenzene	N.D.
5-Nitro-o-toluidine	N.D.
4-Chloroaniline	N.D.
4-Methoxy-m-phenylenediamine	N.D.
4,4'-Diaminodiphenylmethane	N.D.
3,3'-Dichlorobenzidine	N.D.
3,3'-Dimethoxybenzidine	N.D.
3,3'-Dimethybenzidine	N.D.
4,4'-Methylenedi-o-toluidine	N.D.
6-methoxy-m-toluidine	N.D.
4,4'-methylenebis[2-chloroaniline]	N.D.
4,4'-Oxydianiline	N.D.
4,4'-Thiodianiline	N.D.
2-Aminotoluene	N.D.
4-methyl-m-phenylenediamine	N.D.
2,4,5-Trimethylaniline	N.D.
2-Methoxyaniline	N.D.
4-Aminoazobenzene	N.D.
1,3 phenylenediamine	N.D.
Total of other primary aromatic amines	N.D.
Conclusion	Conformity





	Test Result (mg/kg)	
Test Item(s)	1-8	
	3% Acetic acid 70°C, 2h	
4-Aminobiphenyl	N.D.	
Benzidine	N.D.	
4-Chloro-o-Toluidine	N.D.	
2-Naphthylamine	N.D.	
4-amino-2',3-dimethylazobenzene	N.D.	
5-Nitro-o-toluidine	N.D.	
4-Chloroaniline	N.D.	
4-Methoxy-m-phenylenediamine	N.D.	
4,4'-Diaminodiphenylmethane	N.D.	
3,3'-Dichlorobenzidine	N.D.	
3,3'-Dimethoxybenzidine	N.D.	
3,3'-Dimethybenzidine	N.D.	
4,4'-Methylenedi-o-toluidine	N.D.	
6-methoxy-m-toluidine	N.D.	
4,4'-methylenebis[2-chloroaniline]	N.D.	
4,4'-Oxydianiline	N.D.	
4,4'-Thiodianiline	N.D.	
2-Aminotoluene	N.D.	
4-methyl-m-phenylenediamine	N.D.	
2,4,5-Trimethylaniline	N.D.	
2-Methoxyaniline	N.D.	
4-Aminoazobenzene	N.D.	
1,3 phenylenediamine	N.D.	
Total of other primary aromatic amines	N.D.	
Conclusion	Conformity	



Specific ingration of free	Test condition/	MDL	Test Result(s) (mg/kg)			Limit
Test Item(s)	Equipment	(mg/kg)	1 st migration	1-5 2 nd migration	3 rd migration	(mg/kg)
Barium (Ba)		0.1	N.D.	N.D.	N.D.	1
Cobalt (Co)		0.01	N.D.	N.D.	N.D.	0.05
Copper (Cu)		0.25	N.D.	N.D.	N.D.	5
Iron (Fe)		0.25	N.D.	N.D.	N.D.	48
Lithium (Li)		0.1	N.D.	N.D.	N.D.	0.6
Manganese (Mn)		0.1	N.D.	N.D.	N.D.	0.6
Zinc (Zn)		0.25	N.D.	N.D.	N.D.	5
Aluminum (Al)		0.1	N.D.	N.D.	N.D.	1
Europium (Eu)		0.01	N.D.	N.D.	N.D.	/
Gadolinium (Gd)		0.01	N.D.	N.D.	N.D.	/
Lanthanum (La)		0.01	N.D.	N.D.	N.D.	/
Terbium (Tb)		0.01	N.D.	N.D.	N.D.	/
Sum(Eu+Gd+La+Tb)	3% Acetic acid/	/	N.D.	N.D.	N.D.	0.05
Antimony (Sb)	- 70°C, 2h/ ICP-OES	0.01	N.D.	N.D.	N.D.	0.04
Arsenic (As)		0.01	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)		0.002	N.D.	N.D.	N.D.	N.D.
Chromium (Cr)		0.01	N.D.	N.D.	N.D.	N.D.
Lead (Pb)		0.01	N.D.	N.D.	N.D.	N.D.
Mercury (Hg)		0.01	N.D.	N.D.	N.D.	N.D.
Nickel (Ni)		0.01	N.D.	N.D.	N.D.	0.02
Conclusion		/		Conformity		/
Ammonium (NH4 ⁺)		0.10	N.D.	N.D.	N.D.	/
Calcium (Ca)		0.01	0.236	N.D.	N.D.	/
Magnesium (Mg)		0.01	0.025	N.D.	N.D.	/
Potassium (K)		0.01	0.031	N.D.	N.D.	/
Sodium (Na)		0.01	0.076	N.D.	N.D.	/



			Test Result(s) (mg/kg) 1-6			Limit (mg/kg)
Test Item(s)	Test condition/ Equipment	MDL (mg/kg)				
		(1 st migration	2 nd migration	3 rd migration	(g,g)
Barium (Ba)		0.1	N.D.	N.D.	N.D.	1
Cobalt (Co)		0.01	N.D.	N.D.	N.D.	0.05
Copper (Cu)		0.25	N.D.	N.D.	N.D.	5
Iron (Fe)		0.25	N.D.	N.D.	N.D.	48
Lithium (Li)		0.1	N.D.	N.D.	N.D.	0.6
Manganese (Mn)		0.1	N.D.	N.D.	N.D.	0.6
Zinc (Zn)		0.25	N.D.	N.D.	N.D.	5
Aluminum (Al)		0.1	N.D.	N.D.	N.D.	1
Europium (Eu)		0.01	N.D.	N.D.	N.D.	/
Gadolinium (Gd)		0.01	N.D.	N.D.	N.D.	/
Lanthanum (La)		0.01	N.D.	N.D.	N.D.	/
Terbium (Tb)		0.01	N.D.	N.D.	N.D.	/
Sum(Eu+Gd+La+Tb)	3% Acetic acid/	/	N.D.	N.D.	N.D.	0.05
Antimony (Sb)	- 70°C, 2h/ ICP-OES	0.01	N.D.	N.D.	N.D.	0.04
Arsenic (As)		0.01	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)		0.002	N.D.	N.D.	N.D.	N.D.
Chromium (Cr)		0.01	N.D.	N.D.	N.D.	N.D.
Lead (Pb)		0.01	N.D.	N.D.	N.D.	N.D.
Mercury (Hg)		0.01	N.D.	N.D.	N.D.	N.D.
Nickel (Ni)		0.01	N.D.	N.D.	N.D.	0.02
Conclusion		/		Conformity		/
Ammonium (NH4 ⁺)		0.10	N.D.	N.D.	N.D.	/
Calcium (Ca)		0.01	0.325	0.181	0.072	/
Magnesium (Mg)		0.01	0.027	0.016	N.D.	/
Potassium (K)		0.01	0.063	0.035	0.013	/
Sodium (Na)		0.01	0.103	0.056	0.019	/



			Test Result(s) (mg/kg) 1-7			Limit (mg/kg)
Test Item(s)	Test condition/ Equipment	MDL (mg/kg)				
		(1 st migration	2 nd migration	3 rd migration	(
Barium (Ba)		0.1	N.D.	N.D.	N.D.	1
Cobalt (Co)		0.01	N.D.	N.D.	N.D.	0.05
Copper (Cu)		0.25	N.D.	N.D.	N.D.	5
Iron (Fe)		0.25	N.D.	N.D.	N.D.	48
Lithium (Li)		0.1	N.D.	N.D.	N.D.	0.6
Manganese (Mn)		0.1	N.D.	N.D.	N.D.	0.6
Zinc (Zn)		0.25	N.D.	N.D.	N.D.	5
Aluminum (Al)		0.1	N.D.	N.D.	N.D.	1
Europium (Eu)		0.01	N.D.	N.D.	N.D.	/
Gadolinium (Gd)		0.01	N.D.	N.D.	N.D.	/
Lanthanum (La)		0.01	N.D.	N.D.	N.D.	/
Terbium (Tb)		0.01	N.D.	N.D.	N.D.	/
Sum(Eu+Gd+La+Tb)	3% Acetic acid/	/	N.D.	N.D.	N.D.	0.05
Antimony (Sb)	- 70°C, 2h/ ICP-OES	0.01	N.D.	N.D.	N.D.	0.04
Arsenic (As)		0.01	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)		0.002	N.D.	N.D.	N.D.	N.D.
Chromium (Cr)		0.01	N.D.	N.D.	N.D.	N.D.
Lead (Pb)		0.01	N.D.	N.D.	N.D.	N.D.
Mercury (Hg)		0.01	N.D.	N.D.	N.D.	N.D.
Nickel (Ni)		0.01	N.D.	N.D.	N.D.	0.02
Conclusion		/		Conformity		/
Ammonium (NH4 ⁺)		0.10	N.D.	N.D.	N.D.	/
Calcium (Ca)		0.01	0.280	0.138	0.044	/
Magnesium (Mg)		0.01	0.033	0.017	N.D.	/
Potassium (K)		0.01	0.046	0.023	N.D.	/
Sodium (Na)		0.01	0.091	0.044	0.014	/



	Test condition/ Equipment		Test Result(s) (mg/kg) 1-8			Limit (mg/kg)
Test Item(s)		MDL (mg/kg)				
			1 st migration	2 nd migration	3 rd migration	
Barium (Ba)		0.1	N.D.	N.D.	N.D.	1
Cobalt (Co)		0.01	N.D.	N.D.	N.D.	0.05
Copper (Cu)		0.25	N.D.	N.D.	N.D.	5
Iron (Fe)		0.25	N.D.	N.D.	N.D.	48
Lithium (Li)		0.1	N.D.	N.D.	N.D.	0.6
Manganese (Mn)		0.1	N.D.	N.D.	N.D.	0.6
Zinc (Zn)		0.25	N.D.	N.D.	N.D.	5
Aluminum (Al)		0.1	N.D.	N.D.	N.D.	1
Europium (Eu)		0.01	N.D.	N.D.	N.D.	/
Gadolinium (Gd)		0.01	N.D.	N.D.	N.D.	/
Lanthanum (La)		0.01	N.D.	N.D.	N.D.	/
Terbium (Tb)		0.01	N.D.	N.D.	N.D.	/
Sum(Eu+Gd+La+Tb)	3% Acetic acid/ 70°C, 2h/	/	N.D.	N.D.	N.D.	0.05
Antimony (Sb)	ICP-OES	0.01	N.D.	N.D.	N.D.	0.04
Arsenic (As)		0.01	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)		0.002	N.D.	N.D.	N.D.	N.D.
Chromium (Cr)		0.01	N.D.	N.D.	N.D.	N.D.
Lead (Pb)		0.01	N.D.	N.D.	N.D.	N.D.
Mercury (Hg)		0.01	N.D.	N.D.	N.D.	N.D.
Nickel (Ni)		0.01	N.D.	N.D.	N.D.	0.02
Conclusion		/		Conformity		/
Ammonium (NH ₄ ⁺)		0.10	N.D.	N.D.	N.D.	/
Calcium (Ca)		0.01	0.544	0.055	0.016	/
Magnesium (Mg)		0.01	0.057	N.D.	N.D.	/
Potassium (K)		0.01	0.073	N.D.	N.D.	/
Sodium (Na)		0.01	0.141	0.013	N.D.	/



				Unit: %
Test item(s)	Test Condition	MDL	Result(s)	– Limit
Test item(s)	Test Condition	MDL	1-9	Limit
Volatile Organic Matter		0.1	0.25	0.5
Conclusion	200°C, 4h	/	Conformity	/
				Unit: %
Togt itom(a)	Test Condition	MDL	Result(s)	I ::4
Test item(s)	Test Condition	MDL	1-10	– Limit
Volatile Organic Matter		0.1	0.13	0.5
Conclusion	200°C, 4h	/	Conformity	/

- Peroxide value

			Unit: %
Test Item	MDL	Result(s)	Limit
		1-9	
Peroxide value	0.2	N.D.	Absent
Conclusion	/	Conformity	/

Test Item	MDL	Result(s) 1-10	Limit
Peroxide value	0.2	N.D.	Absent
Conclusion	/	Conformity	/

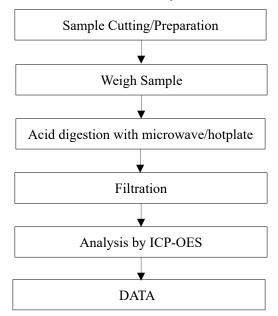
- Specific Migration of Organotin (measured as Tin)

	Test Result	
Test point	Specific Migration of Organotin (measured as Tin)/ (mg/kg)	Conclusion
	3% Acetic acid, 70°C, 2h/	
1-9	N.D.	Conformity
1-10	N.D.	Conformity
Limit	0.1	/
MDL	0.01	/

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

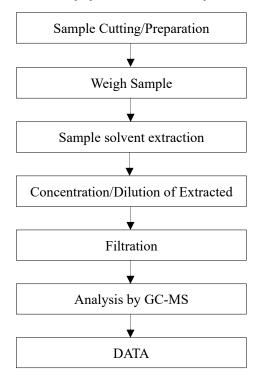
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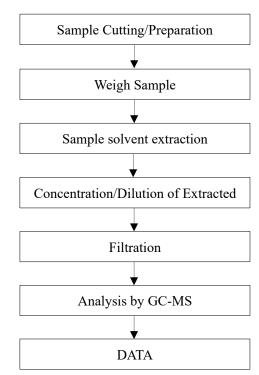


Test Flow Chart of Heavy Metal Content

Test Flow Chart of Polycyclic-aromatic Hydrocarbons (PAHs)







Test Flow Chart of Phthalates



Conditions of Issuance of Test Reports

1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Std & Tech Co., Ltd. (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Clients").

2. Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.

3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.

4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.

5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.

6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.7. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.

8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

*** End of Report ***