

# **TEST REPORT**

Reference No	` نے	WTF21F11121808F
Applicant	in	Mid Ocean Brands B.V.
Address	NILT	7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon Hong Kong
Manufacturer	:4	114276
Sample Name		RPET bottle
Model No	et .	MO6357
		<ol> <li>In accordance with Regulation (EU) No 10/2011 with amendments and Regulation (EC) No 1935/2004.</li> <li>In accordance with French Décret n°2007-766 with amendments and Regulation (EC) No 1935/2004.</li> </ol>
Test Conclusion	W.	Pass (Please refer to next pages for details)
Date of Receipt sample	15th	2021-11-09
Date of Test	:	2021-11-09 to 2021-11-22
Date of Issue	7/	2021-11-22
Test Result	7	Please refer to next page (s)
Note	4:1	Selected test(s) as requested by applicant.

#### Remarks:

The results shown in this test report refer only to the sample(s) tested; this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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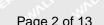
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Compiled by: Approved by:

Abby Zhou Project Engineer

Dino.Zhang / Technical Manager







# 1. Overall Migration Test

Reference No.: WTF21F11121808F

A A	TEX SEX SI	EX NUTER R	esult (mg/dm	ir, m	to the	
Food Simulant	Test Condition	1 <sup>st</sup> Migration			LOQ (mg/dm²)	Limit (mg/dm <sup>2</sup> )
WITEK WITEK WA	IER WALTER WALTE	No.1	No.2	No.3		EK OLIEK
3% Acetic Acid	70°C for 2 hours	ND N	ND	ND	3	
10% Ethanol	70°C for 2 hours	ND	ND	ND	Mer 3 Mer	mr mr

Food Simulant	ar to the	Result (mg/dm²)			TIL MUT.	ar an
	Test Condition	2	2 <sup>nd</sup> Migration		LOQ (mg/dm²)	Limit (mg/dm²)
	EX WITEK WALTER	No.1	No.2	No.3	(4.9, 4.1.1)	y get
3% Acetic Acid	70°C for 2 hours	ND_	ND	ND	3 4	711 - 711
10% Ethanol	70°C for 2 hours	ND	ND	ND T	3 200	Mrtie-Mrtie

	We am and	Re	sult (mg/dn	LIER WILLER	Limit (mg/dm²)	
Food Simulant	Test Condition	11/1 2/3	3 <sup>rd</sup> Migration	LOQ (mg/dm²)		
	A V / ,&	No.1	No.2	No.3	(9, )	
3% Acetic Acid	70°C for 2 hours	ND	ND	ND	unit 3 unit	10
10% Ethanol	70°C for 2 hours	ND	ND	ND	3 Jet	10

- 1. Test method: With reference to BS EN 1186-1: 2002 and BS EN 1186-3: 2002
- 2. "mg/dm<sup>2</sup>" = milligram per square decimetre
- 3. "°C" = Celsius degree
- 4. LOQ = Limit of quantitation
- 5. ND = Not Detected or lower than limit of quantitation
- 6. The specification was quoted from (EU) No 10/2011 and its amendments (EU) 2016/1416, (EU) 2017/752, (EU)2019/37 and (EU) 2020/1245.



Emile wer	Took Constition	Result (mg/kg)	1.00(===/(==)	Limit	
Food Simulant	Test Condition	No.4	LOQ(mg/kg)	(mg/kg)	
3% Acetic Acid	70°C for 2 hours	ND III WALL	20	60	
10% Ethanol	70°C for 2 hours	ND TO THE STATE OF	20	60	

#### Note:

- 1. Test method: With reference to EN 1186-1: 2002 and EN 1186-3: 2002
- 2. "mg/kg" = milligram per kilogram of foodstuff in contact with
- 3. "°C" = Celsius degree
- 4. LOQ = Limit of quantitation
- 5. ND = Not Detected or lower than limit of quantitation
- 6. The specification was quoted from Council of Europe Resolution AP(2004)5 and French Arrêté du 25 novembre 1992 for Silicone Elastomers.

#### 2. Peroxide Value Test\*

Toot Itom	Result	Limit white white
Test Item	set stet with No.4 with win	WA WELLING TO STATE
Peroxide Value	Absent	Absent

#### Note:

- 1. Test method: With reference to European Pharmacopeia (2005) ANNEX X F, Clause 2.5.5, method A.
- 2. The specification was quoted from French Arrêté du 25 novembre 1992 for Silicone Elastomers.
- 4. The testing item marked with '\*' does not been accredited by CNAS.

## 3. Volatile Organic Compounds

Toot Home	Result (%)	100 (%)	Limit (%)	
Test Item	No.4	LOQ (%)		
Volatile Organic compounds	0.17	0.05	0.5	

- 1. Test method: With reference to French Arrêté du 25 novembre 1992 Annex III for silicone Elastomers.
- 2. "%" = percentage by weight
- 3. LOQ = Limit of quantitation
- 4. The specification was quoted from French Arrêté du 25 novembre 1992 for Silicone Elastomers.





4. Specific Migration of Organotin (as Tin)

Took Hom	Result (mg/kg)	100 (mg/kg)	Limit (mg/kg)	
Test Item	No.4	LOQ (mg/kg)		
Specific Migration of Organotin (as Tin)	ND ND	0.01	0.1	

#### Note:

- 1. Test Method: With reference to BS EN 13130-1: 2004, sample preparation in 3% acetic acid at 70°C for 2 hours, analysis was performed by ICP-MS.
- 2. "mg/kg" = milligram per kilogram
- 3. LOQ = Limit of quantitation
- 4. ND = Not Detected, less than LOQ
- 5. The specification was quoted from French Arrêté du 25 novembre 1992 for Silicone Elastomers.

# 5. Bisphenol A Content\*

Test Item	White	Result	(mg/kg)				
	No.1	No.2	No.3	No.4	LOQ (mg/kg)	Limit (mg/kg)	
Bisphenol A	ND	ND	- ND	ND	0.1	Not Detected	

- 1. Test Method: With reference to EPA3550C:2007, analysis was performed by GC-MS.
- 2. "mg/kg" = milligram per kilogram
- 3. LOQ = Limit of quantitation
- 4. ND = Not Detected or lower than limit of quantitation
- 5. The specification was quoted from Law No 2012-1442.
- 6. The testing item marked with '\*' does not been accredited by CNAS.





6. Specific Migration of heavy metal

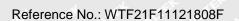
Must me me me	20, 4	Result(mg/kg	WILLER MALLE	MULL MULL		
Test Items	PLIES WALLE	1 <sup>st</sup> Migration	14	LOQ (mg/kg)	Limit (mg/kg)	
Murry Murry My My	No.1	No.2	No.3	ALTER WALTER	WILL MULL	
Specific migration of Nickel	ND	ND	ND	0.01	TEK INTEK	
Specific migration of Aluminium	ND	ND	an ND an	0.1	t 75	
Specific migration of Barium	ND	ND	ND ND	0.1	mr - m	
Specific migration of Cobalt	ND	ND	ND	0.01	MITER - MITE	
Specific migration of Copper	ND	ND ND	ND	0.1	11 - 11th	
Specific migration of Iron	0.1	ND	ND	0.1	r. Mr.	
Specific migration of Lithium	ND	ND	ND	0.01	EK WITEK W	
Specific migration of Manganese	ND	ND	ND	0.01		
Specific migration of Zinc	ND	ND	ND	0.1	Mr M.	
Specific migration of Antimony*	ND	ND	- ND	0.01	MITER WALTE	
Specific migration of Arsenic*	ND	ND	ND	0.01	Not detected (<0.01)	
Specific migration of Cadmium*	ND	ND	ND	0.002	Not detected (<0.002)	
Specific migration of Chromium*	ND	ND	ND ND	0.01	Not detected (<0.01)	
Specific migration of Mercury*	ND	ND	ND	0.01	Not detected (<0.01)	
Specific migration of Lead*	ND	nt ND nt	ND	0.01	Not detected (<0.01)	
Specific migration of Europeum*	ND	ND ND	ND	0.02	MULL OF	
Specific migration of Gadolinium*	ND	ND	ND	0.02	L MITEL MAI	
Specific migration of Lanthanum*	ND	ND	ND	0.02	130 W	
Specific migration of Terbium*	ND	ND	ND	0.02	White Mile	

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	20.	Result(mg/kg	WITE WALTE		
Test Items	NETER WALTE	2 <sup>nd</sup> Migration	20	LOQ (mg/kg)	Limit (mg/kg)
mer mer me m	No.1	No.2	No.3	WILL MUIL A	Wir Mur
Specific migration of Nickel	ND	ND	ND	0.01	TEK METEK N
Specific migration of Aluminium	ND	ND	AL ND AL	0.1	t 13-
Specific migration of Barium	ND	ND	J ND J	0.1	Mr Mu
Specific migration of Cobalt	ND	ND	ND	0.01	MITEL MALTE
Specific migration of Copper	ND	ND	ND	0.1	1 - 1 th
Specific migration of Iron	ND	ND	ND	0.1	r mr
Specific migration of Lithium	ND	ND	ND	0.01	EX WILLEY
Specific migration of Manganese	ND	ND	ND	0.01	- 4th 51
Specific migration of Zinc	ND	ND	ND	0.1	145 - 140
Specific migration of Antimony*	ND	ND	ND +	0.01	INLIER WILLE
Specific migration of Arsenic*	ND	ND	ND	0.01	Not detected (<0.01)
Specific migration of Cadmium*	ND	ND	ND	0.002	Not detected (<0.002)
Specific migration of Chromium*	ND	ND	ND	0.01	Not detected (<0.01)
Specific migration of Mercury*	ND N	ND 0	ND	0.01	Not detected (<0.01)
Specific migration of Lead*	ND	ND	ND	0.01	Not detected (<0.01)
Specific migration of Europeum *	ND	ND ND	ND	0.02	in mer m
Specific migration of Gadolinium*	ND	ND	ND	0.02	L WILLER WALL
Specific migration of Lanthanum*	ND N	ND	ND	0.02	The Tex
Specific migration of Terbium*	ND	ND	ND	0.02	White Mirk

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the must must must must be the	20, 20,	Result(mg/kg	MITER WALTER	White whi	
Test Items	ALTER MALTE	3 <sup>rd</sup> Migration	20	LOQ (mg/kg)	Limit (mg/kg)
mer mer me in in	No.1	No.2	No.3	WALTE WALLE	
Specific migration of Nickel	ND	ND	ND	0.01	0.02
Specific migration of Aluminium	ND	ND	MD M	0.1	1.
Specific migration of Barium	ND	ND	ND S	0.1	with the
Specific migration of Cobalt	ND	ND	ND +	0.01	0.05
Specific migration of Copper	ND T	J ND	ND	0.1	5
Specific migration of Iron	ND	ND S	ND	0.1	48
Specific migration of Lithium	ND	ND	ND	0.01	0.6
Specific migration of Manganese	ND	ND	ND	0.01	0.6
Specific migration of Zinc	ND	ND	ND	0.100	5
Specific migration of Antimony*	ND	ND	o ND o t	0.01	0.04
Specific migration of Arsenic*	ND	ND	ND	0.01	Not detected (<0.01)
Specific migration of Cadmium*	ND	ND	ND	0.002	Not detected (<0.002)
Specific migration of Chromium*	ND on	ND	ND	0.01	Not detected (<0.01)
Specific migration of Mercury*	ND OF	ND W	ND	0.01	Not detected (<0.01)
Specific migration of Lead*	+ ND	ND on t	ND	0.01	Not detected (<0.01)
Specific migration of Europeum*	ND	ND	ND	0.02	Wer W
Specific migration of Gadolinium*	ND	ND	ND	0.02	0.00
Specific migration of Lanthanum*	ND ND	ND	ND	0.02	Sum<0.05
Specific migration of Terbium*	ND	ND	ND	0.02	Write Mure





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#### Note:

- 1. Test Method: With reference to BS EN 13130-1: 2004, sample preparation in 3% acetic acid at 70°C for 2 hours, analysis was performed by ICP-OES and ICP-MS.
- 2. "mg/kg" = milligram per kilogram of foodstuff in contact with
- 3. LOQ = Limit of quantitation
- 4. ND = Not Detected or lower than limit of quantitation
- 5. The specification was quoted from (EU) No 10/2011 and its amendments (EU) 2016/1416, (EU) 2017/752 and (EU) 2020/1245.
- 6. The testing item marked with '\*' does not been accredited by CNAS.

# 7. Specific Migration of Primary Aromatic Amines

Test Item	Result (mg/kg)			1.00 (mg/kg)	Limit (ma/ka)	
rest item c	No.1	No.2	No.3	LOQ (mg/kg)	Limit (mg/kg)	
Migration of Primary aromatic amines	ND	ND N	ND	0.002	<0.01mg/kg	

- 1. Test Method: With reference to § 64 LFGB L No. 00.00-6, analysis was performed by UV-visible Spectrometer.
- 2. Test Condition and simulant: 3% acetic acid at 70°C for 2 hours.
- 3. "mg/kg" = milligram per kilogram of foodstuff in contact with
- 4. LOQ = Limit of quantitation
- 5. ND = Not Detected or lower than limit of quantitation
- 6. The specification was quoted from (EU) No 10/2011 and its amendments (EU) 2016/1416, (EU) 2017/752 and (EU) 2020/1245.



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8. Specific Migration of Primary Aromatic Amines (single substance) \*

	72. 7	Result(mg/kg)  1 <sup>st</sup> Migration			LOQ (mg/kg)	Limit (mg/kg)
Test Items	CAS No.					
		No.1	No.2	No.3	- (mg/kg)	(ilig/kg)
2-methoxyaniline	90-04-0	ND	ND	ND	0.002	it Tilk
4,4'-Diaminobiphenyl	92-87-5	ND	ND	ND	0.002	-2
4,4'-Methylen-bis-(2-chloroaniline)	101-14-4	ND	ND	ND	0.002	WILLE A
4,4'-Diaminodiphenylmethane	101-77-9	ND	ND	ND	0.002	
4,4'-Oxydianiline	101-80-4	ND	ND	ND	0.002	iner our
4-chloroaniline	106-47-8	ND	ND	ND	0.002	SEK TIE
3,3'-Dimethoxybenzidine	119-90-4	ND	ND	ND	0.002	( Z <sub>1</sub> )
3,3'-Dimethylbenzidine	119-93-7	ND	ND.	ND	0.002	MILE.
2-Methoxy-5-methylaniline	120-71-8	ND	ND	ND	0.002	
2,4,5 – Trimethylaniline	137-17-7	ND ND	ND	ND	0.002	ance -a
4,4'-Thiodianiline	139-65-1	ND	ND	ND	0.002	JEK J
4-aminoazobenzene	60-09-3	ND	ND	ND	0.002	7,
2,4-diaminoanisol	615-05-4	ND	ND	ND	0.002	EL NATE
4,4'-diamino-3,3'- dimethyldiphenylmethane	838-88-0	ND	ND	ND	0.002	WILLES .
2-Naphthylamine	91-59-8	ND	ND	ND ND	0.002	
3,3'-Dichlorobenzidine	91-94-1	ND -	ND	ND	0.002	1401.
4-Aminobiphenyl	92-67-1	ND	ND	ND	0.002	18t - 18
2-methylaniline	95-53-4	ND	ND	ND	0.002	7/1
4-chloro-o-Toluidine	95-69-2	ND	ND	ND	0.002	A WATER
2,4-Toluylendiamine	95-80-7	ND	ND	ND	0.002	,
2,4-Aminoazotoluene	97-56-3	ND	ND	ND	0.002	white w
2-Amino-4-nitrotoluene	99-55-8	ND	ND	ND	0.002	10 - C
2,4-Xylidin	95-68-1	ND	ND	ND	0.002	10 Thy
2,6-Xylidin	87-62-7	ND	ND	ND	0.002	EF RETER
1, 3 - phenylene diamine	108-45-2	ND	ND	ND	0.002	2,

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E WILL MUT, MUT, MUT, MUT,	CAS No.	Result(mg/kg)  2 <sup>nd</sup> Migration			LOQ (mg/kg)	Limit (mg/kg)
Test Items						
		No.1	No.2	No.3	- (ilig/kg)	(mg/kg)
2-methoxyaniline	90-04-0	ND	ND	ND	0.002	ik Tiek
4,4'-Diaminobiphenyl	92-87-5	ND	ND	ND	0.002	
4,4'-Methylen-bis-(2-chloroaniline)	101-14-4	ND	ND	ND	0.002	WILLE A
4,4'-Diaminodiphenylmethane	101-77-9	ND	ND	ND	0.002	
4,4'-Oxydianiline	101-80-4	ND	ND	ND	0.002	iner and
4-chloroaniline	106-47-8	ND	ND	ND	0.002	SEP STE
3,3'-Dimethoxybenzidine	119-90-4	ND	ND	ND	0.002	-24
3,3'-Dimethylbenzidine	119-93-7	ND	ND N	ND	0.002	JALIE .
2-Methoxy-5-methylaniline	120-71-8	ND	ND	ND	0.002	
2,4,5 – Trimethylaniline	137-17-7	ND ND	ND	ND	0.002	aver - an
4,4'-Thiodianiline	139-65-1	ND	ND	ND	0.002	TEK IT
4-aminoazobenzene	60-09-3	ND	ND	ND	0.002	70,
2,4-diaminoanisol	615-05-4	ND	ND	ND	0.002	CIP-TE
4,4'-diamino-3,3'- dimethyldiphenylmethane	838-88-0	ND	ND	ND	0.002	WILLER W
2-Naphthylamine	91-59-8	ND	ND	ND ND	0.002	
3,3'-Dichlorobenzidine	91-94-1	ND	ND	ND	0.002	Write - OV
4-Aminobiphenyl	92-67-1	ND	ND	ND	0.002	18t - 18
2-methylaniline	95-53-4	ND	ND	ND	0.002	7/1
4-chloro-o-Toluidine	95-69-2	ND	ND	ND	0.002	1 (C) (S) (E)
2,4-Toluylendiamine	95-80-7	ND	ND	ND	0.002	
2,4-Aminoazotoluene	97-56-3	ND	ND	ND	0.002	Writer W
2-Amino-4-nitrotoluene	99-55-8	ND	ND	ND	0.002	18t 1
2,4-Xylidin	95-68-1	ND	ND	ND	0.002	1. Thy
2,6-Xylidin	87-62-7	ND	ND	ND	0.002	EF RETER
1, 3 - phenylene diamine	108-45-2	ND	ND	ND	0.002	



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	211 20	Result(mg/kg)  3 <sup>rd</sup> Migration			LOQ (mg/kg)	Limit (mg/kg)
Test Items	CAS No.					
		No.1	No.2	No.3	(mg/kg)	(1119/Kg)
2-methoxyaniline	90-04-0	ND	ND	ND	0.002	ND
4,4'-Diaminobiphenyl	92-87-5	ND	ND	ND	0.002	ND
4,4'-Methylen-bis-(2-chloroaniline)	101-14-4	ND	ND.	ND	0.002	ND
4,4'-Diaminodiphenylmethane	101-77-9	ND	ND	ND	0.002	ND
4,4'-Oxydianiline	101-80-4	ND	ND	ND	0.002	ND
4-chloroaniline	106-47-8	ND	ND	ND	0.002	ND
3,3'-Dimethoxybenzidine	119-90-4	ND	ND	ND	0.002	ND
3,3'-Dimethylbenzidine	119-93-7	ND	ND +	ND	0.002	ND
2-Methoxy-5-methylaniline	120-71-8	ND	ND	ND	0.002	ND
2,4,5 – Trimethylaniline	137-17-7	ND ND	ND	ND	0.002	MD II
4,4'-Thiodianiline	139-65-1	ND	ND	ND	0.002	ND S
4-aminoazobenzene	60-09-3	ND	ND	ND	0.002	ND
2,4-diaminoanisol	615-05-4	ND	ND	ND	0.002	ND
4,4'-diamino-3,3'- dimethyldiphenylmethane	838-88-0	ND	ND	ND	0.002	ND
2-Naphthylamine	91-59-8	ND	ND	ND	0.002	ND
3,3'-Dichlorobenzidine	91-94-1	ND	ND	ND	0.002	ND
4-Aminobiphenyl	92-67-1	ND	ND	ND	0.002	ND ND
2-methylaniline	95-53-4	ND	ND	ND	0.002	ND
4-chloro-o-Toluidine	95-69-2	ND	ND	ND	0.002	ND
2,4-Toluylendiamine	95-80-7	ND	ND	ND	0.002	ND
2,4-Aminoazotoluene	97-56-3	ND	ND	ND	0.002	ND.
2-Amino-4-nitrotoluene	99-55-8	ND	ND	ND	0.002	ND
2,4-Xylidin	95-68-1	ND	ND	ND	0.002	ND
2,6-Xylidin	87-62-7	ND	ND	ND	0.002	ND
1, 3 - phenylene diamine	108-45-2	ND	ND	ND	0.002	ND





#### Note:

- 1. Test Method: With reference to EN 13130-1:2004, analysis was performed by LC-MS-MS.
- 2. Test Condition and simulant: 3% acetic acid at 70°C for 2 hours.
- 3. "mg/kg" = milligram per kilogram of foodstuff in contact with
- 4. LOQ = Limit of quantitation
- 5. ND = Not Detected or lower than limit of quantitation
- 6. The specification was quoted from (EU) No 10/2011 and its amendments (EU) 2016/1416, (EU) 2017/752 and (EU) 2020/1245.
- 7. The testing item marked with '\*' does not been accredited by CNAS.

### Sample Photo:



#### Photograph of parts tested:

No.	Photo of testing part	Parts Description	Client Claimed Material
	10	let mitet mateit ma	EX WHITEX WHITEK WHITE
J. 1		Black plastic	Whitek Whitek
ITEK U		Whitek Whitek Whitek	WILER MUTER MUTER M
SUN-S	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	TEX STEX WIFE W	LIEK WALTER WALTER WAL

Waltek Services (Foshan) Co., Ltd. http://www.waltek.com.cn



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No.	Photo of testing part	Parts Description	Client Claimed Material
	S 5 4 7 8 9 10 H DU HS 8 17 8 W 20 N DU HS 5 8 17 8 W 30 N DU HS	Translucent black plastic	ALIEK WALTER WALTER
MITER  MI	1 2 3 4 5 6 7 8 9 10 11 12 13	Black plastic	Whitek
4	2 1 2 3 4 5 6 7 8 9 10 11 12 13	Transparent silicone rubber	Silicone rubber

===== End of Report =====