

**Test Report No.** : Z138070920

**Report on the submitted sample said to be** : Accessories & Gear

**Sample Description** : Silicone Bracelets

**Applicant & Address** : **DOUBLE REEF, LLC DBA IONLOOP**  
1430 Valwood Parkway Suite 160

**Contact person** : Bob Gotfredson

**Tel No.** : -

**Mail box** : -

**Test Specification** : Adidas A-01 (September 2012, TLV adults)

**Amount Of Sample** : Four

**Buyer's Name / Division** : Accessories & Gear

**Conclusion of report/** : Pass

**Failure test items** : -

**Age Group** : Adults

**Material Name/Code** : Silicone Band/ Small Disc Magnets

**Color Name/ Code** : Black, Blue, White/ Black

**Supplier Name** : IonLoop

**Country Of Origin** : China

**Country Of Destination** : USA

**Material Component** : Silicone/ Magnet

**Sample Classification** : Rubber material/ All metal parts

**Test Key code No.** : Key code 201/ Key code 510

**Report Type** : FT

**Full test report No.** : -

**P.O. No.** : -

**Additional Information:** : -

**Sample Received Date** : 2013-07-19

**Sample Tested Date** : 2013-08-01 to 2013-08-06

Full Test (FT)

For and on behalf of

**TÜV Rheinland (Shenzhen) Co., Ltd.**



2013-08-07      Dumas Zhang / Project Chemist

*Test result is drawn according to the kind and extent of tests performed.  
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.*

**TESTS REQUIRED AND RESULT (SUMMARY)**

Test parameter	Conclusion	Failed component(s)	Remark
Extractable Heavy Metals	Pass	-	-
Total Cadmium Content	Pass	-	-
Total Lead Content	Pass	-	-
$\Sigma$ Phthalates	Pass	-	-
Organotin Compounds	Pass	-	-
Nonylphenol(NP)+Octylphenol(OP)+ Nonylphenoethoxylates(NPEO)+ Octylphenoethoxylates (OPEO)	Pass	-	-
Polycyclic Aromatic Hydrocarbons (PAHs)	Pass	-	-
Nickel Release	Pass	-	-

**Material list**

Material No.	Material	Color	Location	Remark
1	Rubber	Black	Silicone bracelets loop	Art.1
2	Rubber	Blue	Silicone bracelets loop	Art.2
3	Rubber	White	Silicone bracelets loop	Art.3
4	Magnet	Black	Magnet inside silicone bracelets	Art.1/2/3

**Extractable Heavy Metals**

**Test method:** Extracted by artificial acidic sweat solution, ref. to DIN EN ISO 105 E04:2009, then ref. to DIN EN ISO 11885:2009, detected by ICP-OES or ICP-MS.

**Test result:**

Test No.			1	2	3	A-01 requirements	
Material No.			1	2	3		
Parameter	Unit	RL	Result	Result	Result	Infant	Adult
Pb (Lead)	mg/kg	0.02	0.03	0.09	n.d.	<0.2	<1
Cd (Cadmium)	mg/kg	0.02	n.d.	n.d.	n.d.	<0.1	<0.1
Cr (Chromium)	mg/kg	0.5	n.d.	n.d.	n.d.	<1	<2
Hg (Mercury)	mg/kg	0.02	n.d.	n.d.	n.d.	<0.02	<0.02
Conclusion			Pass	Pass	Pass	-	

(Refer to Appendix 1 for details)

**Total Cadmium Content**

**Test method:** For plastic: EN 1122: 2001 method B  
 For other material: sample digested with acid and determined by AAS

**Test result:**

Test No.	Material No.	Total Cd Content (mg/kg)	Conclusion	A-01 requirements
		RL: 10 mg/kg		
1	1+2+3	n.d.	Pass	<40
2	4	n.d.	Pass	

(Refer to Appendix 1 for details)

**Total Lead Content**

**Test method:** Sample was digested with mixed acid and analysed by ICP-OES or AAS,.  
 Ref. to DIN EN ISO 11885:2009.

**Test result:**

Test No.	Material No.	Total Lead Content (mg/kg)	Conclusion	A-01 requirements
		RL: 10 mg/kg		
1	1	24	Pass	<40
2	2	n.d.	Pass	
3	3	n.d.	Pass	
4	4	13	Pass	

(Refer to Appendix 1 for details)

**Phthalates**

**Test method:** Organic solvent extraction, analyzed by GC-MS, Ref. to CPSC-CH-C1001-09.3:2010.

**Test result:**

Parameter	CAS No.	Unit	Test No.	1	2	3	A-01 requirements	
			Material No.	1	2	3		
			RL	Result	Result	Result		
Dibutyl phthalate (DBP)	84-74-2	%	0.005	n.d.	n.d.	n.d.	-	
Benzylbutyl phthalate (BBP)	85-68-7	%	0.005	n.d.	n.d.	n.d.		
Diethylhexyl phthalate (DEHP)	117-81-7	%	0.005	n.d.	n.d.	n.d.		
Di-n-octyl phthalate (DNOP)	117-84-0	%	0.005	n.d.	n.d.	n.d.		
Diisodecyl phthalate (DIDP)	26761-40-0	%	0.005	n.d.	n.d.	n.d.		
Diisononyl phthalate (DINP)	28553-12-0	%	0.005	n.d.	n.d.	n.d.		
Diisobutyl phthalate (DIBP)	84-69-5	%	0.005	n.d.	n.d.	n.d.		
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DNHUP)	68515-42-4	%	0.01	n.d.	n.d.	n.d.		
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	%	0.01	n.d.	n.d.	n.d.		
Di-n-hexyl phthalate (DnHP)	84-75-3	%	0.005	n.d.	n.d.	n.d.		
Di-(2-methoxyethyl) phthalate (DMEP)	117-82-8	%	0.005	n.d.	n.d.	n.d.		
Total phthalate		%	-	n.d.	n.d.	n.d.		< 0.05
Conclusion			-	Pass	Pass	Pass		-

(Refer to Appendix 1 for details)

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**Organotin Compounds**
**Test method:** Ref. to ISO 17353:2004, Organic solvent extraction, analyzed by GC-MS.

**Test result:**

Test No.			1	A-01 requirements	
Material No.			1+2+3		
Parameter	Unit	RL	Result	Infant	Adult
DBT(Dibutyltin)	mg/kg	0.005	n.d.	<1	<1
TBT(Tributyltin)	mg/kg	0.005	n.d.	<0.05	<0.05
TPhT(Triphenyltin)	mg/kg	0.005	n.d.	<0.5	<1
Conclusion			Pass	-	-

*(Refer to Appendix 1 for details)*
**Nonylphenol (NP)+Octylphenol (OP)+  
Nonylphenoethoxylates (NPEO)+Octylphenoethoxylates (OPEO) content**
**Test method:** For NP/OP - Organic solvent extraction, GC-MS.  
 For NPEO/OPEO - Organic solvent extraction, LC-MS.

**Test result:**

Test No.			1	A-01 requirements	
Material No.			1+2+3		
Parameter	Unit	RL	Result		
NP	mg/kg	5	n.d.	<100	
OP	mg/kg	5	n.d.	<100	
NPEO	mg/kg	20	n.d.	-	
OPEO	mg/kg	20	n.d.	-	
NP+OP+NPEO+OPEO	mg/kg	-	<1000	<1000	
Conclusion			Pass	-	-

*(Refer to Appendix 1 for details)*

**Polycyclic Aromatic Hydrocarbons (PAHs)**
**Test method:** ZEK 01.4-08

**Test result:**

Parameter	CAS No.	Unit	Test No.	1	A-01 requirements
			Material No.:	1+2+3	
Parameter	CAS No.	Unit	RL	Result	-
Acenaphthene	83-32-9	mg/kg	0.2	n.d.	-
Acenaphthylene	208-96-8	mg/kg	0.2	n.d.	-
Anthracene	120-12-7	mg/kg	0.2	n.d.	-
Benzo[a]anthracene	56-55-3	mg/kg	0.2	n.d.	-
Benzo[a]pyrene(BaP)	50-32-8	mg/kg	0.2	n.d.	<1
Benzo[b]fluoranthene	205-99-2	mg/kg	0.2	n.d.	-
Benzo[k]fluoranthene	207-08-9	mg/kg	0.2	n.d.	-
Benzo[j]fluoranthene	205-82-3	mg/kg	0.2	n.d.	-
Benzo[g,h,i]perylene	191-24-2	mg/kg	0.2	n.d.	-
Benzo[e]pyrene	192-97-2	mg/kg	0.2	n.d.	-
Chrysene	218-01-9	mg/kg	0.2	n.d.	-
Dibenzo[a,h]anthracene	53-70-3	mg/kg	0.2	n.d.	-
Fluoranthene	206-44-0	mg/kg	0.2	n.d.	-
Fluorene	86-73-7	mg/kg	0.2	n.d.	-
Indeno[1,2,3-cd]pyrene	193-39-5	mg/kg	0.2	n.d.	-
Naphthalene	91-20-3	mg/kg	0.2	n.d.	-
Phenanthrene	85-01-8	mg/kg	0.2	n.d.	-
Pyrene	129-00-0	mg/kg	0.2	n.d.	-
Sum PAHs (EPA+EU)	NA	mg/kg	NA	n.d.	<10
Conclusion	NA	NA	NA	Pass	-

*(Refer to Appendix 1 for details)*
**Nickel Release**
**Test method:** According to Nickel – coating, after wear and corrosion according to DIN EN 12472:2009 & DIN EN 1811:2011, The tests have been performed in succession.

**Test result:**

Test No.	Material No.	Trial	Surface area (cm <sup>2</sup> )	Test solution volume (ml)	Dilution volume (ml)	Nickel released (µg/cm <sup>2</sup> /week)	A-01 requirements (µg/cm <sup>2</sup> /week)	Conclusion
						RL:0.05		
1	1(*1)	1	0.71	1.0	5.0	n.d.	< 0.5	Pass
		2	0.71	1.0	5.0	0.08		
		3	0.71	1.0	5.0	n.d.		

*(Refer to Appendix 1 for details)*

## Appendix 1

### Abbreviation:

RL = Reporting Limit

n.d. = Not Detected (< Reporting Limit)

mg/kg = milligram per kilogram

NA = Not Applicable

% denotes percentage

ml = milliliters

cm<sup>2</sup> = square centimeters

µg/cm<sup>2</sup>/week = micrograms per one square centimeter per week

### Remark for each test:

#### Phthalates

1. Single components with an amount smaller than RL were not considered by the calculation of the sum. In the case of all 11 Phthalates were not detected, the result is stated n.d.

#### Polycyclic Aromatic Hydrocarbons (PAHs)

1. Single components with an amount of <0.2 mg/kg were not considered by the calculation of the sum. In the case of all 18 PAHs according to EPA were not detected, the result is stated n.d.

#### Nickel Release

\*1. The sample was tested according to DIN EN 12472:2009 & DIN EN 1811:2011

\*2. For articles intended to come into direct and prolonged contact with the skin:

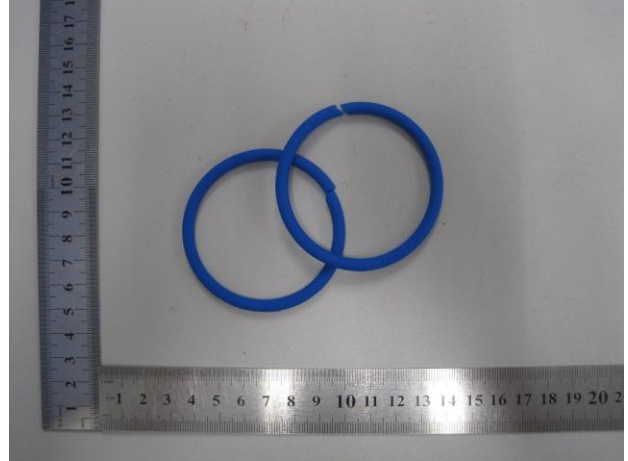
The nickel release values that are greater than 0.28 µg/cm<sup>2</sup>/week but less than 0.88 µg/cm<sup>2</sup>/week, no clear decision is possible for compliance of this test article.

Sample photo:

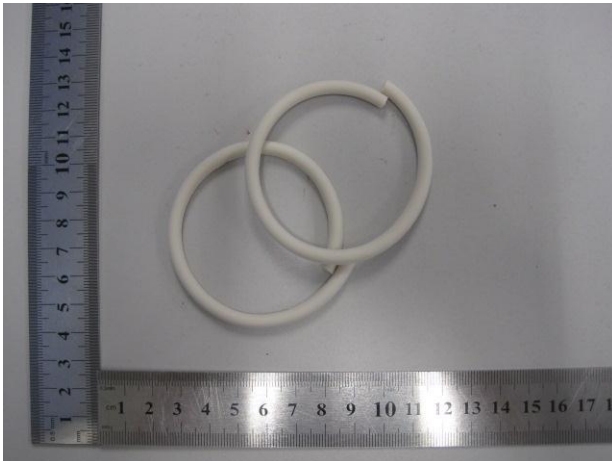
**Material No. 1**



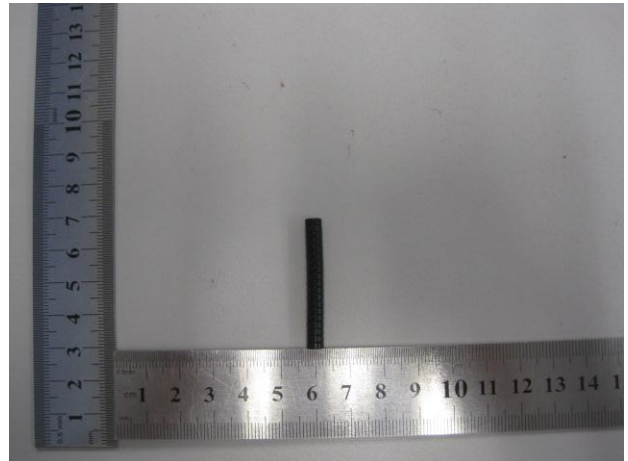
**Material No. 2**



**Material No. 3**



**Material No. 4**



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