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Client: World Flex Public Co., Ltd.
30 Bangna-Trad Soi 25, Bangna, Bangna, Bangkok 10260 Thailand

Identification/Model No(s): Rubber Thread in Ribbon form made of latex, in color white and black

Sample Receiving date: 2016-04-29

Testing Period: 2016-05-29 – 2016-05-09

Delivery condition: *Apparent good, Samples tested as received*

Test Specification:

Test result:

Legal requirement:

Test parameter chosen by customer:

Screening of substances of very high concern (SVHC) subject to authorisation, according to (EU) No 143/2011, (EU) No 125/2012, (EU) No 348/2013 and (EU) No 895/2014 (Annex XIV of EC No 1907/2006) and candidate list by European Chemical Agency (ECHA), information obligations according to ECHA guideline issued in 2011

The tested material does not contain any SVHCs over 0.1 % by weight

Other Information:

Country of Origin: THAILAND

**For and on behalf of
TÜV Rheinland Thailand Ltd.**

 

2016-05-19

Wilawan Sriprom / Manager

Date

Name/Position

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.

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Material list

Item: Rubber Thread in Ribbon form made of latex, in color white and black

Material List:

Material No.	Material	Color	Location
M001	Latex	White	Refer to photo

1. Screening of SVHCs subject to authorisation, according to (EU) No 143/2011, (EU) No 125/2012, (EU) No 348/2013 and (EU) No 895/2014 (Annex XIV of (EC) No 1907/2006), and SVHCs in candidate list by European Chemical Agency (ECHA), information obligations according to ECHA guideline issued in 2011

Screening of substances classified as Carcinogenic, Mutagenic or toxic to Reproduction (CMR) categories 1A &1B, and substance other than authorisation & candidate list.

Test Method: 1) Test portion is digested with acid and assisted with microwave, the elements are analysed by ICP-OES.
 2) Test portion is extracted by organic solvent, semi-quantitative analysis by GC-MS / UV-Vis.
 3) Test portion is extracted by organic solvent, the extraction solution is analyzed by Headspace-GC/MS / LC-DAD-MS / LC-MS/MS
 4) A representative test portion is prepared by cryogenic milling.

Test Result:

Test No.:	T001
Material No.:	M001
Result (%)	n.d.

Abbreviation: n.d. = Not Detected (< Reporting Limit)
 % = Percentage

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Remark:

(*1) The reporting limit for each individual SVHC subject to authorisation according to (EU) No 143/2011, (EU) No 125/2012, (EU) No 348/2013 and (EU) No 895/2014 (Annex XIV of EC No 1907/2006):

	Substance	CAS No.	Reporting Limit
1	4,4'- Diaminodiphenylmethane (MDA)	101-77-9	0.01%
2	Benzyl butyl phthalate (BBP)	85-68-7	0.01%
3	Bis (2-ethylhexyl)phthalate (DEHP)	117-81-7	0.01%
4	Dibutyl phthalate (DBP)	84-74-2	0.01%
5	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	25637-99-4 / 3194-55-6 / 134237-50-6 / 134237-51-7 / 134237-52-8	0.01%
6	5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)	81-15-2	0.01%
7	2,4-Dinitrotoluene (2,4-DNT)	121-14-2	0.01%
8	Diisobutyl phthalate (DIBP)	84-69-5	0.01%
9	Tris(2-chloroethyl)phosphate	115-96-8	0.01%
10	Diarsenic pentaoxide (*3)	1303-28-2	0.01%
11	Diarsenic trioxide (*3)	1327-53-3	0.01%
12	Lead chromate (*3)(*4)	7758-97-6	0.01%
13	Lead chromate molybdate sulphate red (C.I. Pigment Red 104) (*3)(*4)	12656-85-8	0.01%
14	Lead sulfochromate yellow (C.I. Pigment Yellow 34) (*3)	1344-37-2	0.01%
15	Trichloroethylene	79-01-6	0.01%
16	Chromium trioxide (*4)	1333-82-0	0.01%
17	Acids generated from chromium trioxide and their oligomers: Names of the acids and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid. (*4)	7738-94-5 / 13530-68-2	0.01%
18	Sodium dichromate (*3)	7789-12-0 / 10588-01-9	0.01%
19	Potassium dichromate (*4)	7778-50-9	0.01%
20	Ammonium dichromate (*4)	7789-09-5	0.01%
21	Potassium chromate (*4)	7789-00-6	0.01%
22	Sodium chromate (*4)	7775-11-3	0.01%
23	Formaldehyde, oligomeric reaction products with aniline (technical MDA) (*11)	25214-70-4	0.01%
24	1,2-Dichloroethane	107-06-2	0.01%
25	Bis(2-methoxyethyl) ether	111-96-6	0.01%
26	Arsenic acid (*3)	7778-39-4	0.01%
27	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	0.01%
28	Dichromium tris(chromate) (*4)	24613-89-6	0.01%
29	Strontium chromate (*4)	7789-06-2	0.01%
30	Potassium hydroxyoctaoxodizincatedichromate (*4)	11103-86-9	0.01%
31	Pentazinc chromate octahydroxide (*4)	49663-84-5	0.01%

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(*2) The reporting limit for each individual SVHC in Candidate List by ECHA:

	Substance	CAS No.	Reporting Limit
32	Anthracene	120-12-7	0.01%
33	Bis(tributyltin) oxide (TBTO) (*3) (*5)	56-35-9	0.01%
34	Triethyl arsenate (*3)	15606-95-8	0.01%
35	Lead hydrogen arsenate (*3)	7784-40-9	0.01%
36	Cobalt dichloride (*3)	7646-79-9	0.01%
37	Acrylamide	79-06-1	0.01%
38	Anthracene oil (*7)	90640-80-5	
39	Anthracene oil, anthracene paste, distn. lights (*7)	91995-17-4	
40	Anthracene oil, anthracene paste, anthracene fraction (*7)	91995-15-2	0.01%(*8)
41	Anthracene oil, anthracene-low (*7)	90640-82-7	
42	Anthracene oil, anthracene paste (*7)	90640-81-6	
43	Pitch, coal tar, high temperature (*7)	65996-93-2	
44	Boric acid (*3) (*6)	10043-35-3 / 11113-50-1	0.01%
45	Disodium tetraborate, anhydrous (*3) (*6)	1303-96-4 / 1330-43-4 / 12179-04-3	0.01%
46	Tetraboron disodium heptaoxide, hydrate (*3) (*6)	12267-73-1	0.01%
47	2-Methoxyethanol	109-86-4	0.01%
48	2-Ethoxyethanol	110-80-5	0.01%
49	Cobalt(II) sulphate (*3)	10124-43-3	0.01%
50	Cobalt(II) dinitrate (*3)	10141-05-6	0.01%
51	Cobalt(II) carbonate (*3)	513-79-1	0.01%
52	Cobalt(II) diacetate (*3)	71-48-7	0.01%
53	Alkanes C10-C13, chloro (Short Chain Chlorinated Paraffins) (SCCP)	85535-84-8	0.01%
54	2-Ethoxyethyl acetate	111-15-9	0.01%
55	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUF)	68515-42-4	0.01%
56	Hydrazine	302-01-2 / 7803-57-8	0.01%
57	1-Methyl-2-pyrrolidone (NMP)	872-50-4	0.01%
58	1,2,3-Trichloropropane	96-18-4	0.01%
59	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	0.01%
60	Aluminosilicate Refractory Ceramic Fibres (RCF) (*9)	-	0.01%
61	Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) (*9)	-	0.01%
62	Bis(2-methoxyethyl) phthalate	117-82-8	0.01%
63	2-Methoxyaniline,o-Anisidine	90-04-0	0.01%
64	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	0.01%
65	Calcium arsenate (*3)	7778-44-1	0.01%
66	Trilead diarsenate (*3)	3687-31-8	0.01%
67	N,N-dimethylacetamide (DMAC)	127-19-5	0.01%
68	Phenolphthalein	77-09-8	0.01%
69	Lead dipicrate (*3)	6477-64-1	0.01%
70	Lead diazide, Lead azide (*3)	13424-46-9	0.01%

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71	Lead styphnate (*3)	15245-44-0	0.01%
72	1,2-bis(2-methoxyethoxy)ethane (TEGDME, triglyme)	112-49-2	0.01%
73	1,2-dimethoxyethane, ethylene glycol dimethyl ether (EGDME)	110-71-4	0.01%
74	Diboron trioxide (*3) (*6)	1303-86-2	0.01%
75	Formamide	75-12-7	0.01%
76	Lead(II) bis(methanesulfonate) (*3)	17570-76-2	0.01%
77	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	2451-62-9	0.01%
78	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	59653-74-6	0.01%
79	4,4'-bis(dimethylamino)benzophenone (Michler's ketone), MK	90-94-8	0.01%
80	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base), RMK	101-61-1	0.01%
81	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] (*10)	2580-56-5	
82	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] (*10)	548-62-9	0.01%
83	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] (*10)	561-41-1	
84	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] (*10)	6786-83-0	
85	Bis(pentabromophenyl) ether (decabromodiphenyl ether) (DecaBDE)	1163-19-5	0.01%
86	Pentacosafuorotridecanoic acid	72629-94-8	0.01%
87	Tricosafuorododecanoic acid	307-55-1	0.01%
88	Henicosafuoroundecanoic acid	2058-94-8	0.01%
89	Heptacosafuorotetradecanoic acid	376-06-7	0.01%
90	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated (OPEO) [covering well-defined substances and UVCB substances, polymers and homologues]	-	0.01%
91	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) (ADCA) (*12)	123-77-3	0.05%
92	4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	-	0.01%
93	Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry]	85-42-7 / 13149-00-3 / 14166-21-3	0.01%
94	Hexahydromethylphthalic anhydride (MHHPA) [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] [The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]	25550-51-0 / 19438-60-9 / 48122-14-1 / 57110-29-9	0.01%
95	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	
96	Diisopentylphthalate	605-50-5	0.01%
97	N-pentyl-isopentylphthalate	776297-69-9	
98	Methoxyacetic acid (MAA)	625-45-6	0.01%

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99	N,N-dimethylformamide	68-12-2	0.01%
100	1,2-Diethoxyethane	629-14-1	0.01%
101	Diethyl sulphate	64-67-5	0.01%
102	Dimethyl sulphate	77-78-1	0.01%
103	N-methylacetamide	79-16-3	0.01%
104	1-bromopropane (n-propyl bromide)	106-94-5	0.01%
105	Furan	110-00-9	0.01%
106	Methyloxirane (Propylene oxide)	75-56-9	0.01%
107	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	0.01%
108	Dibutyltin dichloride (DBTC) (*3)	683-18-1	0.01%
109	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	0.01%
110	4,4'-methylenedi-o-toluidine	838-88-0	0.01%
111	4,4'-oxydianiline and its salts	101-80-4	0.01%
112	4-Aminoazobenzene	60-09-3	0.01%
114	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	0.01%
113	6-methoxy-m-toluidine (p-cresidine)	120-71-8	0.01%
115	Biphenyl-4-ylamine	92-67-1	0.01%
116	o-aminoazotoluene	97-56-3	0.01%
117	o-Toluidine	95-53-4	0.01%
118	Acetic acid, lead salt, basic (*3)	51404-69-4	0.01%
119	Trilead bis(carbonate) dihydroxide (*3)	1319-46-6	0.01%
120	Lead oxide sulfate (*3)	12036-76-9	0.01%
121	[Phthalato(2-)]dioxotrilead (*3)	69011-06-9	0.01%
122	Dioxobis(stearato)trilead (*3)	12578-12-0	0.01%
123	Fatty acids, C16-18, lead salts (*3)	91031-62-8	0.01%
124	Lead bis(tetrafluoroborate) (*3)	13814-96-5	0.01%
125	Lead cyanamidate (*3)	20837-86-9	0.01%
126	Lead dinitrate (*3)	10099-74-8	0.01%
127	Lead monoxide (lead oxide) (*3)	1317-36-8	0.01%
128	Orange lead (lead tetroxide) (*3)	1314-41-6	0.01%
129	Lead titanium trioxide (*3)	12060-00-3	0.01%
130	Lead titanium zirconium oxide (*3)	12626-81-2	0.01%
131	Pyrochlore, antimony lead yellow (*3)	8012-00-8	0.01%
132	Pentalead tetraoxide sulphate (*3)	12065-90-6	0.01%
133	Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD),the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008] (*3)	68784-75-8	0.01%
134	Silicic acid, lead salt (*3)	11120-22-2	0.01%
135	Sulfurous acid, lead salt, dibasic (*3)	62229-08-7	0.01%
136	Tetraethyllead (*3)	78-00-2	0.01%
137	Tetralead trioxide sulphate (*3)	12202-17-4	0.01%
138	Trilead dioxide phosphonate (*3)	12141-20-7	0.01%
139	Dipentyl phthalate (DPP)	131-18-0	0.01%
140	Ammonium pentadecafluorooctanoate (APFO) (*13)	3825-26-1	0.01%
141	Pentadecafluorooctanoic acid (PFOA)	335-67-1	0.01%

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142	Cadmium (*3)	7440-43-9	0.01%
143	Cadmium oxide (*3)	1306-19-0	0.01%
144	4-Nonylphenol, branched and linear, ethoxylated (NPEO) [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]	-	0.01%
145	Dihexyl phthalate	84-75-3	0.01%
146	Trixylyl phosphate	25155-23-1	0.01%
147	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	0.01%
148	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-minonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	0.01%
149	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	0.01%
150	Lead di(acetate) (*3)	301-04-2	0.01%
151	Cadmium sulphide (*3)	1306-23-6	0.01%
152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	0.01%
153	Cadmium chloride (*3)	10108-64-2	0.01%
154	Sodium perborate,perboric acid, sodium salt (*3) (*6)	-	0.01%
155	Sodium peroxometaborate (*3) (*6)	7632-04-4	0.01%
156	Cadmium fluoride (*3)	7790-79-6	0.01%
157	Cadmium sulphate (*3)	10124-36-4 / 31119-53-6	0.01%
158	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	0.01%
159	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	0.01%
160	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) (*14)	15571-58-1	0.01%
161	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE) (*15)	-	0.01%
162	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)	68515-51-5 / 68648-93-1	0.01%
163	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]	-	0.01%
164	1,3-propanesultone	1120-71-4	0.01%
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	0.01%
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	0.01%
167	Nitrobenzene	98-95-3	0.01%
168	Perfluorononan-1-oic-acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4	0.01%

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Remark:

- (*3) The substances are tested and calculated in terms of its respective elements (e.g. As, Pb, Co, B, Cd, Sn).
- (*4) The substances are tested and calculated in terms of Cr (VI).
- (*5) The substance is tested and calculated in terms of Tributyl tin.
- (*6) The substances are confirmed and tested in terms of Boric acid when Boron is detected in the sample.
- (*7) The substances are UVCB (substance of unknown or variable composition, complex reaction products or biological materials), which are identified by its main constituents.
- (*8) Individual concentrations to the constituent of UVCB with an amount of < 0.01% were not considered by the calculation of the sum.
- (*9) The test results are based on microscopic and chemical evaluation.
- (*10) The substances are quantified in terms of Michler's ketone and Michler's base by LC-MS, as Michler's ketone or Michler's base was found exceeds 0.01%.
- (*11) The content oligomer is determined by Py-GC/MS.
- (*12) The content of diazene-1,2-dicarboxamide is analyzed in terms of its breakdown product.
- (*13) The substance is tested in terms of pentadecafluorooctanoate.
- (*14) The substance is tested and calculated in terms of Dioctyl tin.
- (*15) The substance is tested and calculated in terms of Monoctyl tin and Dioctyl tin.

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Sample photo:

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