

Reference No.: TRGZ1303151 Page No.: 1 of 11 Date: Mar. 27, 2013

Client: DONGGUAN OEM SERV CARGO SECURITY PRODUCTS CO., LTD.

Address: NO11, SHENGFENG ROAD, CHUANYEYUAN, XINHE, WANJIANG, DONGGUAN

The following merchandise was (were) submitted and identified by the client as:

Name of Product: Buckle

Test Model: BF10/WB16N3.5/WB25G5.0 wire buckle

Model May Cover:

Sample Received: Mar. 11, 2013

Test Period: Mar. 11, 2013 - Mar. 20, 2013

Test Request: According to European Commission Regulation 1907/2006 (REACH Act), to test

the SVHC content which have been listed in ECHA's SVHC candidate list till 19

Dec. 2012.

http://echa.europa.eu/web/guest/candidate-list-table

In-house method with reference to EPA: 8270D, 3052, 6010C, 3550C and Test Method:

EN14362, DIN EN ISO 17353, IEC 62321, ZEK01.4-08, EN 14582.

Conclusion: According to the analyzed result on submitted samples, the contents of

mentioned test items are less than 0.1%.

Issued by:

TÜV NORD Green Product Service Centre **Technical Manager**



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TEST RESULTS:

Seq.	Test Item(s)	EC. No.	CAS No.	MDL (%)	Test Results [▲] (%)
1	2,4-Dinitrotoluene	204-450-0	121-14-2	0.01	N.A.
2	2-Ethoxyethanol	203-804-1	110-80-5	0.005	N.A.
3	2-Methoxyethanol	203-713-7	109-86-4	0.005	N.A.
4	4,4'- Diaminodiphenylmethane(MDA)	202-974-4	101-77-9	0.005	N.A.
5	5-tert-butyl-2,4,6-trinitro-m-xylene(musk xylene)	201-329-4	81-15-2	0.005	N.A.
6	Acrylamide	201-173-7	79-06-1	0.01	N.A.
7	Alkanes, C ₁₀₋₁₃ , chloro (Short Chain Chlorinated Paraffins)	287-476-5	85535-84-8	0.005	N.A.
8	Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.2 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the two following conditions: a) Al ₂ O ₃ and SiO ₂ are present within the following concentration ranges: Al ₂ O ₃ : 43.5 – 47 % w/w, and SiO ₂ : 49.5 – 53.5 % w/w, or Al ₂ O ₃ : 45.5 – 50.5 % w/w, and SiO ₂ : 48.5 – 54 % w/w, b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (μm)***			0.01	N.D.
9	Ammonium dichromate*	232-143-1	7789-09-5	0.01	N.D.
10	Anthracene	204-371-1	120-12-7	0.005	N.A.
11	Anthracene oil	292-602-7	90640-80-5	0.01	N.A.
12	Anthracene oil, anthracene paste	292-603-2	90640-81-6	0.01	N.A.
13	Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2	0.01	N.A.



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Seq.	Test Item(s)	EC. No.	CAS No.	MDL (%)	Test Results [▲] (%)
14	Anthracene oil, anthracene paste; distn. Lights	295-278-5	91995-17-4	0.01	N.A.
15	Anthracene oil, anthracene-low	292-604-8	90640-82-7	0.01	N.A.
16	Benzyl butyl phthalate(BBP)	201-622-7	85-68-7	0.005	N.A.
17	Bis(2-ethylhexyl)phthalate(DEHP)	204-211-0	117-81-7	0.005	N.A.
18	Bis(tributyltin)oxide(TBTO)**	200-268-0	56-35-9	0.005	N.A.
19	Boric acid*	233-139-2 / 234-343-4	10043-35-3 / 11113-50-1	0.01	N.D.
20	Chromic acid, Oligomers of chromic acid and dichromic acid, Dichromic acid	231-801-5 - 236-881-5	7738-94-5 - 13530-68-2	0.01	N.D.
21	Chromium trioxide*	215-607-8	1333-82-0	0.01	N.D.
22	Cobalt dichloride*	231-589-4	7646-79-9	0.01	N.D.
23	Cobalt(II) carbonate*	208-169-4	513-79-1	0.01	N.D.
24	Cobalt(II) diacetate*	200-755-8	71-48-7	0.01	N.D.
25	Cobalt(II) dinitrate*	233-402-1	10141-05-6	0.01	N.D.
26	Cobalt(II) sulphate*	233-334-2	10124-43-3	0.01	N.D.
27	Diarsenic pentaoxide*	215-116-9	1303-28-2	0.01	N.D.
28	Diarsenic trioxide*	215-481-4	1327-53-3	0.01	N.D.
29	Dibutyl Phthalate(DBP)	201-557-4	84-74-2	0.002	N.A.
30	Diisobutyl Phthalate(DIBP)	201-553-2	84-69-5	0.01	N.A.
31	Disodium tetraborate, anhydrous*	215-540-4	1303-96-4/ 1330-43-4/ 12179-04-3	0.01	N.D.
32	Hexabromocyclododecane(HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	247-148-4 and 221-695-9	25637-99-4 3194-55-6 (134237-50-6) (134237-51-7) (134237-52-8)	0.002	N.A.
33	Lead chromate*	231-846-0	7758-97-6	0.01	N.D.
34	Lead chromate molybdate sulfate red (C.I. Pigment Red 104)*	235-759-9	12656-85-8	0.01	N.D.

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Seq.	Test Item(s)	EC. No.	CAS No.	MDL (%)	Test Results [▲] (%)
35	Lead hydrogen arsenate*	232-064-2	7784-40-9	0.01	N.D.
36	Lead sulfochromate yellow (C.I. Pigment Yellow 34)*	215-693-7	1344-37-2	0.01	N.D.
37	Coal tar pitch, high temperature	266-028-2	65996-93-2	0.01	N.A.
38	Potassium chromate*	232-140-5	7789-00-6	0.01	N.D.
39	Potassium dichromate*	231-906-6	7778-50-9	0.01	N.D.
40	Sodium chromate*	231-889-5	7775-11-3	0.01	N.D.
41	Sodium dichromate*	234-190-3	7789-12-0/ 10588-01-9	0.01	N.D.
42	Tetraboron disodium heptaoxide, hydrate*	235-541-3	12267-73-1	0.01	N.D.
43	Trichloroethylene	201-167-4	79-01-6	0.01	N.A.
44	Triethyl arsenate*	427-700-2	15606-95-8	0.01	N.D.
45	Tris(2-chloroethyl)phosphate	204-118-5	115-96-8	0.01	N.A.
46	Zirconia Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.2 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the two following conditions: a) Al ₂ O ₃ , SiO ₂ and ZrO ₂ are present within the following concentration ranges: Al ₂ O ₃ : 35 – 36 % w/w, and SiO ₂ : 47.5 – 50 % w/w, b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (μm)****			0.01	N.D.



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Seq.	Test Item(s)	EC. No.	CAS No.	MDL (%)	Test Results [▲] (%)
47	2-ethoxyethyl acetate	203-839-2	111-15-9	0.01	N.A.
48	Strontium chromate*	232-142-6	7789-06-2	0.01	N.D.
49	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	271-084-6	68515-42-4	0.01	N.A.
50	Hydrazine	206-114-9	7803-57-8 302-01-2	0.01	N.A.
51	1-methyl-2-pyrrolidone	212-828-1	872-50-4	0.01	N.A.
52	1,2,3-trichloropropane	202-486-1	96-18-4	0.01	N.A.
53	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters,C7-rich	276-158-1	71888-89-6	0.01	N.A.
54	Lead dipicrate*	229-335-2	6477-64-1	0.01	N.D.
55	Lead styphnate*	239-290-0	15245-44-0	0.01	N.D.
56	Lead azide Lead diazide*	236-542-1	13424-46-9	0.01	N.D.
57	Phenolphthalein	201-004-7	77-09-8	0.01	N.A.
58	2,2'-dichloro-4,4'-methylenedianiline	202-918-9	101-14-4	0.01	N.A.
59	N,N-dimethylacetamide	204-826-4	127-19-5	0.01	N.A.
60	Trilead diarsenate*	222-979-5	3687-31-8	0.01	N.D.
61	Calcium arsenate*	231-904-5	7778-44-1	0.01	N.D.
62	Arsenic acid*	231-901-9	7778-39-4	0.01	N.D.
63	Bis(2-methoxyethyl) ether	203-924-4	111-96-6	0.01	N.A.
64	1,2-Dichloroethane	203-458-1	107-06-2	0.01	N.A.
65	4-(1,1,3,3-tetramethylbutyl)phenol	205-426-2	140-66-9	0.01	N.A.
66	2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0	0.01	N.A.
67	Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8	0.01	N.A.
68	Formaldehyde, oligomeric reaction products with aniline	500-036-1	25214-70-4	0.01	N.A.
69	Pentazinc chromate octahydroxide*	256-418-0	49663-84-5	0.01	N.D.
70	Potassium hydroxyoctaoxodizincatedi-chromate*	234-329-8	11103-86-9	0.01	N.D.

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Seq.	Test Item(s)	EC. No.	CAS No.	MDL (%)	Test Results [▲] (%)
71	Dichromium tris(chromate)*	246-356-2	24613-89-6	0.01	N.D.
72	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	112-49-2	0.01	N.A.
73	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4	0.01	N.A.
74	Diboron trioxide*	215-125-8	1303-86-2	0.01	N.D.
75	Formamide	200-842-0	75-12-7	0.01	N.A.
76	Lead(II) bis(methanesulfonate) *	401-750-5	17570-76-2	0.01	N.D.
77	TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	219-514-3	2451-62-9	0.01	N.A.
78	β-TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4, 6-(1H,3H,5H)-trione)	423-400-0	59653-74-6	0.01	N.A.
79	4,4'-bis(dimethylamino) benzophenone (Michler's ketone)	202-027-5	90-94-8	0.01	N.A.
80	N,N,N',N'-tetramethyl-4,4'-methylenedia niline (Michler'sbase)	202-959-2	101-61-1	0.01	N.A.
81	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-y lidene]dimethylam monium 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)] ****	208-953-6	548-62-9	0.01	N.A.
82	[4-[[4-anilino-1-naphthyl][4-(dimethylami no)phenyl]methylene]cyclohexa-2,5-die n-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)] ****	219-943-6	2580-56-5	0.01	N.A.
83	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)] ****	229-851-8	6786-83-0	0.01	N.A.



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Seq.	Test Item(s)	EC. No.	CAS No.	MDL (%)	Test Results [▲] (%)
84	4,4'-bis(dimethylamino)-4"-(methylamin o)trityl alcohol [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] ****	209-218-2	561-41-1	0.01	N.A.
85	Bis(pentabromophenyl) ether (DecaBDE)	214-604-9	1163-19-5	0.01	N.A.
86	Pentacosafluorotridecanoic acid	276-745-2	72629-94-8	0.01	N.A.
87	Tricosafluorododecanoic acids	206-203-2	307-55-1	0.01	N.A.
88	Henicosafluoroundecanoic acid	218-165-4	2058-94-8	0.01	N.A.
89	Heptacosafluorotetradecanoic acid	206-803-4	376-06-7	0.01	N.A.
90	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated -covering well-defined substances and UVCB substances, polymers and homologues			0.01	N.A.
91	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	N.A.
92	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	204-650-8	123-77-3	0.01	N.A.
93	Cyclohexane-1,2-dicarboxylic anhydride (Hexahydrophthalic anhydride - HHPA)	201-604-9	85-42-7	0.01	N.A.
94	Hexahydromethylphathalic anhydride,Hexahydro-4-methylphathalic anhydride,Hexahydro-1-methylphathalic anhydride,Hexahydro-3-methylphathalic anhydride	247-094-1, 243-072-0, 256-356-4, 260-566-1	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	0.01	N.A.
95	Methoxy acetic acid	210-894-6	625-45-6	0.01	N.A.
96	1,2-Benzenedicarboxylic acid, dipentylester,branched and linear	284-032-2	84777-06-0	0.01	N.A.
97	Diisopentylphthalate (DIPP)	210-088-4	605-50-5	0.01	N.A.



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Seq.	Test Item(s)	EC. No.	CAS No.	MDL (%)	Test Results [▲] (%)
98	N-pentyl-isopentylphtalate			0.01	N.A.
99	1,2-Diethoxyethane	211-076-1	629-14-1	0.01	N.A.
100	N,N-dimethylformamide; dimethyl formamide	200-679-5	68-12-2	0.01	N.A.
101	Dibutyltin dichloride (DBT)	211-670-0	683-18-1	0.01	N.A.
102	Acetic acid, lead salt, basic*	257-175-3	51404-69-4	0.01	N.D.
103	Basic lead carbonate (trilead bis(carbonate)dihydroxide)*	215-290-6	1319-46-6	0.01	N.D.
104	Lead oxide sulfate (basic lead sulfate)*	234-853-7	12036-76-9	0.01	N.D.
105	[Phthalato(2-)]dioxotrilead (dibasic lead phthalate)*	273-688-5	69011-06-9	0.01	N.D.
106	Dioxobis(stearato)trilead*	235-702-8	12578-12-0	0.01	N.D.
107	Fatty acids, C16-18, lead salts*	292-966-7	91031-62-8	0.01	N.D.
108	Lead bis(tetrafluoroborate)*	237-486-0	13814-96-5	0.01	N.D.
109	Lead cynamidate*	244-073-9	20837-86-9	0.01	N.D.
110	Lead dinitrate*	233-245-9	10099-74-8	0.01	N.D.
111	Lead oxide (lead monoxide)*	215-267-0	1317-36-8	0.01	N.D.
112	Lead tetroxide (orange lead)*	215-235-6	1314-41-6	0.01	N.D.
113	Lead titanium trioxide*	235-038-9	12060-00-3	0.01	N.D.
114	Lead Titanium Zirconium Oxide*	235-727-4	12626-81-2	0.01	N.D.
115	Pentalead tetraoxide sulphate*	235-067-7	12065-90-6	0.01	N.D.
116	Pyrochlore, antimony lead yellow	232-382-1	8012-00-8	0.01	N.D.
117	Silicic acid, barium salt, lead-doped*	272-271-5	68784-75-8	0.01	N.D.
118	Silicic acid, lead salt*	234-363-3	11120-22-2	0.01	N.D.
119	Sulfurous acid, lead salt, dibasic*	263-467-1	62229-08-7	0.01	N.D.
120	Tetraethyllead*	201-075-4	78-00-2	0.01	N.D.
121	Tetralead trioxide sulphate*	235-380-9	12202-17-4	0.01	N.D.
122	Trilead dioxide phosphonate*	235-252-2	12141-20-7	0.01	N.D.
123	Furan	203-727-3	110-00-9	0.01	N.A.



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Seq.	Test Item(s)	EC. No.	CAS No.	MDL (%)	Test Results [▲] (%)
124	Propylene oxide; 1,2-epoxypropane; methyloxirane	200-879-2	75-56-9	0.01	N.A.
125	Diethyl sulphate	200-589-6	64-67-5	0.01	N.A.
126	Dimethyl sulphate	201-058-1	77-78-1	0.01	N.A.
127	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	143860-04-2	0.01	N.A.
128	Dinoseb	201-861-7	88-85-7	0.01	N.A.
129	4,4'-methylenedi-o-toluidine	212-658-8	838-88-0	0.01	N.A.
130	4,4'-oxydianiline and its salts	202-977-0	101-80-4	0.01	N.A.
131	4-Aminoazobenzene	200-453-6	60-09-3	0.01	N.A.
132	4-methyl-m-phenylenediamine (toluene -2,4 -diamine)	202-453-1	95-80-7	0.01	N.A.
133	6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8	0.01	N.A.
134	Biphenyl-4-ylamine	202-177-1	92-67-1	0.01	N.A.
135	O-aminoazotoluene	202-591-2	97-56-3	0.01	N.A.
136	O-Toluidine	202-429-0	95-53-4	0.01	N.A.
137	N-methylacetamide	201-182-6	79-16-3	0.01	N.A.
138	1-bromopropane(n-propyl bromide)	203-445-0	106-94-5	0.01	N.A.

****** To be continued ******



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Remark 1

- 1) In accordance with Regulation(EC) No. 1907/2006, any producer or importer of articles shall notify ECHA, in accordance with paragraph 4 of Article 7, if a substance meets the criteria in Article 57 and is identified in accordance with Article 59(1), if both the following conditions are met:
- (a) the substance is present in those articles in quantities totalling over 1 tonne per producer or importer per year;
- (b) the substance is present in those articles above a concentration of 0,1 % weight by weight (w/w).
- 2) From 28 October 2008, EU & EEA suppliers of articles which contain substances on the Candidate List in a concentration above 0.1% (w/w) must provide sufficient information, available to them, to their customers and on request to a consumer within 45 days of the receipt of this request. This information must ensure safe use of the article and, as a minimum, include the name of the

Remark 2

- 1)* Calculated concentration of cobalt dichloride, cobalt(II) sulphate, cobalt(II) dinitrate, cobalt(II) carbonate and cobalt(II) diacetate is based on the identified heavy metal and anion result. Calculated concentration of diarsenic pentaoxide, diarsenic trioxide, chromium trioxide, sodium dichromate, dehydrate, lead hydrogen arsenate, triethyl arsenate, lead chromate, sodium chromate, strontium chromate, potassium chromate, ammonium dichromate, potassium dichromate, lead chromate molybdate sulfate red, lead sulfochromate yellow and acids generated from chromium trioxide and their oligomers, Lead dipicrate, Lead styphnate, Lead azide Lead diazide, Trilead diarsenate, Calcium arsenate, Arsenic acid, Potassium hydroxyoctaoxodizincatedi-chromate, Dichromium tris(chromate), Pentazinc chromate octahydroxide, Lead(II) bis(methanesulfonate), Diboron trioxide, Acetic acid, lead salt, basic, Basic lead carbonate (trilead bis(carbonate)dihydroxide), Lead oxide sulfate (basic lead sulfate), [Phthalato(2-)]dioxotrilead (dibasic lead phthalate), Dioxobis(stearato)trilead, Fatty acids, C16-18, lead salts, Lead bis(tetrafluoroborate), Lead cynamidate, Lead dinitrate, Lead oxide (lead monoxide), Lead tetroxide (orange lead), Lead titanium trioxide, Lead Titanium Zirconium Oxide, Pentalead tetraoxide sulphate, Silicic acid, barium salt, lead-doped, Sulfurous acid, lead salt, dibasic, Tetraethyllead, Tetralead trioxide sulphate, Trilead dioxide phosphonate are based on the identified heavy metal result, boric acid, disodium tetraborate, anhydrous and tetraboron disodium heptaoxide, hydrate are based on the identified result of boron and sodium result. The identities of above metal substances present in the article have to be further confirmed;
- 2)** Concentration of bis(tributyltin)oxide, TBTO is reported as tributyltin, TBT. The result is a screening test of TBTO and can cover TBTO and other salts under current technologies. Further investigation is needed to have the exact amount of TBTO;
- 3)*** Calculated concentration of Aluminosilicate, Refractory Ceramic Fibres; Zirconia Aluminosilicate, Refractory Ceremic Fibres is based on the identified heavy metal result and confirmation by microscope;
- 4) ****The substance does only fulfil the criteria of REACH Art. 57 (a) if it contains Michler's ketone (EC Number: 202-027-5) or Michler's base (EC Number: 202-959-2) in a concentration ≥ 0.1% (weight / weight);
- 5) N.D. = Not detected, less than MDL; N.A. = Not Applicable.
- **6)** As the client's requirement, the sample was tested in mixture.

****** To be continued ******

TÜV NORD(Hangzhou)CO.,LTD.

Member of TÜV NORD Group





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Test Part Description: Silver metal + Black metal + Black metal

FLOW CHART

Sample pretreated by acid Sampling digestion and solvent Extraction. Analysis was performed by Data ICP-OES, UV-Vis, LC-MS,GC-MS and GC-ECD.

SAMPLE PHOTO



****** END OF REPORT *******