Test Report

Report No. RLSHF001364180008 Page 1 of 9

Applicant MICC TECH.LIMITED
Address YUHUA ,NANJING CITY,JIANGSU PROVINCE

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the client

Sample Name	PTC Thermistor Alloy Wires/Ni-Cr Alloy Wires/KARMA Alloy Wires/ Pure Nickel Wires/Copper nickel heating alloy wire
Material	Nickel,Iron etc/Nickel,Chrome etc/Nickel,Chrome,Aluminum,Iron etc/Ni/Cu. Ni etc
Sample Received Date	Jan.31,2013
Testing Period	Jan.31,2013 to Feb.5,2013

Test Requested As specified by client, to screen the 36 substances of very high concern(SVHC) under Regulation(EC) No 1907/2006 of REACH in the submitted sample(s).

Test Method Please refer to the following page(s).

Test Result(s) Please refer to the following page(s).

Summary According to the analytical results, concentrations of 36 SVHC substances are all less than 0.1%(w/w) in the submitted sample(s).

Tested by Verna chen. Reviewed by Lucy Zhong

Approved by Joy Su Date Feb.5,2013

Joy Su
Senior Laboratory Manager

No. 12488423

Test Report

Test Method

No.	Substance Name(s)	Test Method and Equipment(s)	Substance Classification	Report Limit
1	Cobalt dichloride*	Refer to US EPA 3052:1996 or US EPA 3050B:1996/BS EN14582:2007, ICP-OES/IC	Carcinogen, cat.2 Toxic for reproduction, cat.2	0.01%
2	Diarsenic pentaoxide*	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES	Carcinogen, cat.1	0.01%
3	Diarsenic trioxide*	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES	Carcinogen, cat.1	0.01%
4	Sodium dichromate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996/US EPA 3060A:1996, ICP-OES/UV-Vis	Carcinogen, cat.2; Mutagen, cat.2; Toxic for reproduction, cat.2	0.01%
5	Lead hydrogen arsenate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES	Carcinogen, cat.1; Toxic for reproduction, cat.1	0.01%
6	Triethyl arsenate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES	Carcinogen, cat.1	0.01%
7	Lead chromate	Refer to US EPA 3052:1996 or US EPA 3050B:1996/US EPA 3060A:1996, ICP-OES/UV-Vis	Carcinogen, cat.2; Toxic for reproduction, cat.1	0.05%
8	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)***	Refer to US EPA 3052:1996 or US EPA 3050B:1996/US EPA 3060A:1996, ICP-OES/UV-Vis	Carcinogen, cat.2; Toxic for reproduction, cat.1	0.05%
9	Lead sulfochromate yellow (C.I. Pigment Yellow 34)***	Refer to US EPA 3052:1996 or US EPA 3050B:1996/US EPA 3060A:1996, ICP-OES/UV-Vis	Carcinogen, cat.2; Toxic for reproduction, cat.1	0.05%
10	Boric acid	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES	Toxic for reproduction, cat.2	0.01%
11	Disodium tetraborate, anhydrous*****	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES	Toxic for reproduction, cat.2	0.01%
12	Tetraboron disodium heptaoxide, hydrate*****	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES	Toxic for reproduction, cat.2	0.01%
13	Sodium chromate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996/US EPA 3060A:1996, ICP-OES/UV-Vis	Carcinogen, cat.2; Mutagenic cat.2; Toxic for reproduction, cat.2	0.01%
14	Potassium chromate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996/US EPA 3060A:1996, ICP-OES/UV-Vis	Carcinogen, cat.2; Mutagenic cat.2	0.01%

Test Report

Test Method

No.	Substance Name(s)	Test Method and Equipment(s)	Substance Classification	Report Limit
15	Ammonium dichromate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996/US EPA 3060A:1996, ICP-OES/UV-Vis	Carcinogen, cat.2; Mutagenic cat.2; Toxic for reproduction, cat.2	0.01%
16	Potassium dichromate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996/US EPA 3060A:1996, ICP-OES/UV-Vis	Carcinogen, cat.2; Mutagenic cat.2; Toxic for reproduction, cat.2	0.01%
17	Cobalt(II) sulphate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996/in-house method, ICP-OES/IC	Toxic for reproduction, cat.2 Carcinogen, cat.2	0.01%
18	Cobalt(II) dinitrate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996/in-house method, ICP-OES/IC	Toxic for reproduction, cat.2 Carcinogen, cat.2	0.01%
19	Cobalt(II) carbonate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996/in-house method, ICP-OES/IC	Toxic for reproduction, cat.2 Carcinogen, cat.2	0.01%
20	Cobalt(II) diacetate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996/in-house method, ICP-OES/IC	Toxic for reproduction, cat.2 Carcinogen, cat.2	0.01%
21	Chromium trioxide*	Refer to US EPA 3052:1996 or US EPA 3050B:1996/US EPA 3060A:1996, ICP-OES/UV-Vis	Carcinogen, cat.1; Mutagenic cat.2	0.01%
22	Acids generated from chromium trioxide and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid*	Refer to US EPA 3052:1996 or US EPA 3050B:1996/US EPA 3060A:1996, ICP-OES/UV-Vis	Carcinogen, cat.2	0.01%
23	Strontium chromate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996/US EPA 3060A:1996, ICP-OES/UV-Vis	Carcinogen, cat.2	0.01%
24	Dichromium tris(chromate)*	Refer to US EPA 3052:1996 or US EPA 3050B:1996/US EPA 3060A:1996, ICP-OES/UV-Vis	Carcinogen, cat.2	0.01%
25	Potassium hydroxyoctaoxodizincatedichromate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996/US EPA 3060A:1996, ICP-OES/UV-Vis	Carcinogen, cat.1	0.01%

Test Report

Test Method

No.	Substance Name(s)	Test Method and Equipment(s)	Substance Classification	Report Limit
26	Pentazinc chromate octahydroxide*	Refer to US EPA 3052:1996 or US EPA 3050B:1996/US EPA 3060A:1996, ICP-OES/UV-Vis	Carcinogen, cat.1	0.01%
27	Aluminosilicate Refractory Ceramic Fibres (RCF) **	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES/SEM-EDS	Carcinogen, cat.2	0.05%
28	Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) **	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES/SEM-EDS	Carcinogen, cat.2	0.05%
29	Arsenic acid*	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES	Carcinogen, cat.1	0.01%
30	Calcium arsenate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES	Carcinogen, cat.1	0.01%
31	Trilead diarsenate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES	Carcinogen, cat.1; Toxic for reproduction, cat.1	0.01%
32	Lead diazide*	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES	Toxic for reproduction, cat.1	0.01%
33	Lead 2,4,6-trinitro-m-phenylene dioxide (Lead styphnate)*	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES	Toxic for reproduction, cat.1	0.01%
34	Lead dipicrate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES	Toxic for reproduction, cat.1	0.01%
35	Diboron trioxide	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES	Toxic for reproduction	0.01%
36	Lead(II) bis methanesulfonate*	Refer to US EPA 3052:1996 or US EPA 3050B:1996, ICP-OES	Toxic for reproduction	0.01%

Test Report

Test Result(s)

No.	Substance Name(s)	CAS No.	EC No.	Concentration(%)
1	Cobalt dichloride*	7646-79-9	231-589-4	N.D.
2	Diarsenic pentaoxide*	1303-28-2	215-116-9	N.D.
3	Diarsenic trioxide*	1327-53-3	215-481-4	N.D.
4	Sodium dichromate*	7789-12-0/ 10588-01-9	234-190-3	N.D.
5	Lead hydrogen arsenate*	7784-40-9	232-064-2	N.D.
6	Triethyl arsenate*	15606-95-8	427-700-2	N.D.
7	Lead chromate	7758-97-6	231-846-0	N.D.
8	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)***	12656-85-8	235-759-9	N.D.
9	Lead sulfochromate yellow (C.I. Pigment Yellow 34)***	1344-37-2	215-693-7	N.D.
10	Boric acid	10043-35-3 11113-50-1	233-139-2 234-343-4	N.D.
11	Disodium tetraborate, anhydrous*****	1330-43-4 12179-04-3 1303-96-4	215-540-4	N.D.
12	Tetraboron disodium heptaoxide, hydrate*****	12267-73-1	235-541-3	N.D.
13	Sodium chromate*	7775-11-3	231-889-5	N.D.
14	Potassium chromate*	7789-00-6	232-140-5	N.D.
15	Ammonium dichromate*	7789-09-5	232-143-1	N.D.
16	Potassium dichromate*	7778-50-9	231-906-6	N.D.
17	Cobalt(II) sulphate*	10124-43-3	233-334-2	N.D.
18	Cobalt(II) dinitrate*	10141-05-6	233-402-1	N.D.
19	Cobalt(II) carbonate*	513-79-1	208-169-4	N.D.
20	Cobalt(II) diacetate*	71-48-7	200-755-8	N.D.
21	Chromium trioxide*	1333-82-0	215-607-8	N.D.
22	Acids generated from chromium trioxide and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid*	7738-94-5 13530-68-2	231-801-5 236-881-5	N.D.
23	Strontium chromate*	7789-06-2	232-142-6	N.D.
24	Dichromium tris(chromate)*	24613-89-6	246-356-2	N.D.
25	Potassium hydroxyoctaoxodizincatedichromate*	11103-86-9	234-329-8	N.D.
26	Pentazinc chromate octahydroxide*	49663-84-5	256-418-0	N.D.

Test Report

Test Result(s)

No.	Substance Name(s)	CAS No.	EC No.	Concentration(%)
27	Aluminosilicate Refractory Ceramic Fibres (RCF) **	-	-	N.D.
28	Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) **	-	-	N.D.
29	Arsenic acid*	7778-39-4	231-901-9	N.D.
30	Calcium arsenate*	7778-44-1	231-904-5	N.D.
31	Trilead diarsenate*	3687-31-8	222-979-5	N.D.
32	Lead diazide*	13424-46-9	236-542-1	N.D.
33	Lead 2,4,6-trinitro-m-phenylene dioxide (Lead styphnate)*	15245-44-0	239-290-0	N.D.
34	Lead dipicrate*	6477-64-1	229-335-2	N.D.
35	Diboron trioxide	1303-86-2	215-125-8	N.D.
36	Lead(II) bis methanesulfonate*	17570-76-2	401-750-5	N.D.

Tested Sample/Part Description Mixed test, silvery metal wire, cupreous metal wire

Test Report

Note:

1. w/w = weight by weight; 0.1% = 1000 mg/kg =1000 ppm
2. N.D. = Not Detected (<report limit)
3. *: Concentration value of Cobalt dichloride; Diarsenic pentaoxide; Diarsenic trioxide; Sodium dichromate; Lead hydrogen arsenate; Triethyl arsenate; Strontium chromate; Sodium chromate; Potassium chromate; Ammonium dichromate; Potassium dichromate; Cobalt(II) sulphate; Cobalt(II) dinitrate; Cobalt(II) carbonate; Cobalt(II) diacetate; Chromium trioxide; Chromic acid, Dichromic acid, and Oligomers of chromic acid and dichromic acid; Dichromium tris(chromate); Potassium hydroxyoctaoxodizincatedichromate; Pentazinc chromate octahydroxide; Calcium arsenate; Trilead diarsenate; Arsenic acid; Lead diazide; Lead 2,4,6-trinitro-m-phenylene dioxide (Lead styphnate); Lead dipicrate; Lead(II) bismethanesulfonate by the conversion from results of certain elements.
4. **: All refractory ceramic fibres are covered by index number 650-017-00-8 in Annex VI of the Regulation on Classification, Labeling and Packaging of chemical substances and mixtures, the so called CLP Regulation (Regulation (EC) No 1272/2008).
5. ***: C.I.: Colour Index
6. *****: Concentration value of Disodium tetraborate, anhydrous and Tetraboron disodium heptaoxide, hydrate is evaluated by Disodium tetraborate, with no consider of the hydrate.
7. ☆: In view of the substance contain variable substances, the test results are calculated based on main constituents of the representative compounds for the substances, and the test results of the representative compounds are calculated based on the result of specified heavy metal elements.
8. ☆: Concentration value of Boric acid; Disodium tetraborate, anhydrous; Tetraboron disodium heptaoxide, hydrate; Diboron trioxide are calculated by the conversion from the test results of certain elements and confirmed by appropriate solvent extraction, meanwhile the book of materials is suggested to be checked for further confirmation.

Test Report

Appendix:

1. Any supplier of an article containing a substance that is included in the Candidate List in a concentration above 0.1 % weight by weight (w/w) has the duty to communicate information in accordance with Article 33 of European Union regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).
   1) Any supplier shall provide the recipient of the article with sufficient information to allow safe use of the article including, as a minimum, the name of that substance.
   2) On request by a consumer any supplier shall provide the consumer with sufficient information to allow safe use of the article including, as a minimum, the name of that substance within 45 days of receipt of the request, free of charge.
2. The supplier of a substance that is included in the Candidate List on their own shall provide the recipient of the substance with a safety data sheet for free compiled in accordance with Article 3 and Annex II of REACH.
3. The supplier of a mixture that containing a substance that is included in the Candidate List shall exchange information in accordance with Article 31, Article 32, and Annex II of REACH.
   1) Any supplier shall provide the recipient of the mixture with a safety data sheet for free where a preparation meets the criteria for classification as dangerous in accordance with Directives 1999/45/EC.
   2) Any supplier shall provide the recipient of the mixture with a safety data sheet for free where a preparation does not meet the criteria for classification as dangerous in accordance with Directive 1999/45/EC, but contains any substance that is included in the Candidate List in an individual concentration of $\geq$ 0.1 % by weight for non-gaseous mixtures or $\geq$ 0.2 % by volume for gaseous mixtures.

Test Report

Photo(s) of the sample(s)



*** End of Report ***

The test report is effective only with both signature and specialized stamp. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.